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The Proposed Plan for the Niagara Escarpment

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The Proposed Plan for the Niagara Escarpment

Sidney Smith
Branch Lending
Service



Prepared by the Niagara Escarpment Commission
in accordance with The Niagara Escarpment
Planning and Development Act.

November 1979



Niagara
Escarpment
Commission



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Introduction to the Proposed Plan



1.1

Introduction

This document – the Proposed Plan – contains the Niagara Escarpment Commission's proposals for a Niagara Escarpment Plan as required by The Niagara Escarpment Planning and Development Act, 1973, as amended.

The Niagara Escarpment Plan will be the approved document resulting from the hearings and recommendations on Parts 2, 3 and 4 and Maps 1-9 of this Proposed Plan.

Part 1 outlines the history and development of this Proposed Plan.

Part 2 contains the land use policies of the Proposed Plan. It includes land use designations, development criteria and implementation policies. The land use designations are illustrated on maps for the four affected Regional Municipalities and the four affected Counties. These maps are:

Map 1	Regional Municipality of Niagara
Map 2	Regional Municipality of Hamilton-Wentworth
Map 3	Regional Municipality of Halton
Map 4	Regional Municipality of Peel – County of Dufferin (South)
Map 5	County of Dufferin (North) – County of Simcoe
Map 6	County of Grey (East)
Map 7	County of Grey (West)
Map 8	County of Bruce (South)
Map 9	County of Bruce (North)

Part 3 contains the proposed Escarpment parks and acquisition policies which include suggested policies for the Bruce Trail. A brief description of 116 existing and proposed parks, largely based on property already in public ownership, is also included.

Part 4 contains general recommendations and observations of the Commission in support of the proposed land use policies and the proposed parks and acquisition policies. Included are recommendations and observations concerning:

- Administration and Implementation of the Plan
- The Bruce Trail
- Scenic Drives
- Conservation Authorities and Recreation
- Significant Geological Areas
- Important Nature Areas
- Heritage
- Tourism and Recreation
- The Tobermory Islands
- Forestry
- Wildlife
- Fisheries
- Agriculture
- Transportation and Utilities
- Mineral Resources

Parts 5, 6 and 7 contain biographical information on the Commission, definitions and a bibliography.

Section 10 of The Niagara Escarpment Planning and Development Act provides for a period before public hearings commence during which time the Escarpment area local municipalities, the regional municipalities, the counties, the advisory committees and the public are invited to submit comments on the Proposed Plan.

In the case of the local municipalities, the advisory committees and the public, the Act stipulates that this period shall not be less than three months from the release of the Proposed Plan.

The advisory committees and the public shall be invited to make their comments to the Commission. The Escarpment area local municipalities shall be invited to make their comments to the council of their county or regional municipality.

The counties and regional municipalities shall be invited to make comments to the Commission, after giving consideration to the comments received from the local municipalities. The period for study and comment by counties and regional municipalities shall not be less than four months from the time of release of the Proposed Plan.

Times and locations of the public hearings will be announced.

For further information please contact:
The Chairman
The Niagara Escarpment Commission
232 Guelph Street
Georgetown, Ontario L7G 4B1
Telephone: 416/877-5191

1.2

The Niagara Escarpment

The Niagara Escarpment is recognized as one of Canada's foremost scenic landforms.

In southern Ontario, it is a ridge of rock several hundred feet high in some locations – stretching 725 kilometres (450 miles) from Queenston on the Niagara River to Tobermory at the tip of the Bruce Peninsula – and forming a richly-varied mosaic of forests, farms, scenic views, cliffs, hills, unusual rock formations, streams, rivers, waterfalls, plant and animal life, historic and archaeological sites, pits and quarries, hamlets, towns and cities.

Geologists describe the Escarpment as a massive topographic feature composed of sediments dating back some 400 - 450 million years to a time when the area lay under a shallow warm sea. This sea lay in a depression on the earth's crust, the centre of which is now the State of Michigan. The depression itself is geologically known as the Michigan Basin. The outer rim of this massive saucer-shaped feature is the Niagara Escarpment.

Today, in Ontario, the Escarpment contains more than 100 sites of geological significance including some of the best exposures of rocks and fossils of the Silurian and Ordovician Periods to be found anywhere in the world.

The Escarpment's natural areas provide habitats for more than 300 species of birds, 53 species of mammals, 36 species of reptiles and amphibians, 90 fish species and 100 varieties of "special interest flora" including 37 types of wild orchids. Endangered species such as the West Virginia White Butterfly are also represented.

Many of southern Ontario's rivers have their headwaters on the Escarpment.

The Niagara Escarpment stretches through the highly-productive agricultural lands of the Niagara Peninsula, around the intensely-industrialized and populated Golden Horseshoe, and up to the pasture and recreation lands of the north. Because of its location, development pressures on various fronts became acute throughout the 1950s, 60s and into the 70s.

The Escarpment area became the site of a multi-million dollar extractive industry. Simultaneously, the demand for permanent and seasonal residences along the Escarpment intensified. As a result, these and other pressures threatened the Niagara Escarpment as a natural area.

The Ontario Government recognized that the pressures of competing land uses must be relieved and set out upon an ambitious and far-sighted program to maintain the natural environment and meet the planning needs of the Escarpment for generations to come.

1.3

The Gertler Report

In March 1967, Ontario Premier John P. Robarts, responding to a growing public concern for the future of the Escarpment area, commissioned a wide-ranging government study into the Niagara Escarpment issue.

Professor Leonard O. Gertler of the University of Waterloo was chosen to direct the study, assisted by a professional team of planners and geographers.

Their recommendations led to the publication in June 1968 of the Niagara Escarpment Study Conservation and Recreation Report – better known as the Gertler Report.

The Report recommended Escarpment land preservation through a combination of government land purchase and land-use regulations; the establishment of a multi-purpose park system; regulatory standards for the aggregate industry; and a joint Provincial-municipal program for financing and administering the program.

With the Escarpment as a central core, criteria based on physical attributes, power of attraction and indicators of development pressure and accessibility were developed to assist in identifying those Escarpment areas most in need of preservation. Three complementary ways of achieving preservation were proposed:

- *Complete Control* – outright public acquisition of lands.
- *Selective Control* – acquisition of defined rights to the land through easements or leases.
- *Regulatory Environmental Control* – control through land use regulations.

As a direct result of this study, the Province took action on several fronts.

1. The Escarpment was specially emphasized in government land acquisition programs and conservation authorities' grants were eventually increased from 50 per cent to 75 per cent for Escarpment land purchases.
2. A number of municipalities were directed by the Province to incorporate Escarpment preservation measures ("Special Policy Areas") in their official plans.
3. Gertler's recommendations on the extractive industry led to passage of The Niagara Escarpment Protection Act, 1970, which was superseded by The Pits and Quarries Control Act in 1971.

1.4

The Niagara Escarpment Inter-Ministerial Task Force

On May 1, 1972, the Government of Ontario announced the appointment of an Inter-Ministerial Task Force on the Niagara Escarpment to investigate still unresolved issues and to consider how the Gertler Report could be translated into government action.

The Task Force was also directed to develop priorities for the acquisition of land by the Government of Ontario and its agencies; to establish land use and development standards; to examine methods of land use control and to recommend a system to ensure the appropriate use of lands; and to advise on all proposals which would result in major changes in existing land use patterns.

To gain first-hand knowledge of the feelings and aspirations of the public, the Task Force conducted public meetings in several communities along the Escarpment such as St. Catharines, Hamilton, Milton, Orangeville, Collingwood, Owen Sound and Lion's Head. In addition, hundreds of briefs and letters were received. The Task Force made direct contact with more than 3,500 people.

The response of the Government of Ontario to the recommendations advanced by the Task Force was embodied in the policy statement of June 1973, "Development Planning in Ontario – The Niagara Escarpment".

It adopted the recommendation that there should be a combination of a strong, provincially-directed program of planning and land use regulation with

public ownership. The following priorities were recommended by the Task Force for future land acquisition:

- 1. Unique ecologic and historic areas.
- 2. New recreational facilities, especially potential park land near urban centres.
- 3. The best route for the Bruce Trail.

It also accepted the Task Force recommendation to establish an interim “Pits and Quarries Restrictive Zone” within which new pits and quarries – including wayside pits – would be prohibited.

1.5

The Niagara Escarpment Planning and Development Act, 1973

The Niagara Escarpment Planning and Development Act, 1973, established the legal framework to conduct the necessary studies and develop specific policy recommendations in this, the Proposed Plan for the Niagara Escarpment.

Section 2 of the Act requires that the Plan will “provide for the maintenance of the Niagara Escarpment and land in its vicinity substantially as a continuous natural environment and to ensure only such development occurs as is compatible with that natural environment”.

Section 8 of the Act states that the Commission’s objectives are:

- to protect unique ecologic and historic areas;
- to maintain and enhance the quality and character of natural streams and water supplies;
- to provide adequate opportunities for outdoor recreation;
- to maintain and enhance the open landscape character of the Niagara Escarpment insofar as possible, by such means as compatible farming or forestry and by preserving the natural scenery;
- to ensure that all new development is compatible with the purpose of this Act as expressed in Section 2;
- to provide for adequate public access to the Niagara Escarpment; and
- to support municipalities within the Niagara Escarpment Planning Area in their exercise of the planning functions conferred upon them by The Planning Act.

In this Proposed Plan, the Commission has endeavoured to meet the goal and objectives of the Act.

1.6

Formation of the Niagara Escarpment Commission

Section 5 of The Niagara Escarpment Planning and Development Act requires that a Commission be established and composed of 17 members, as follows:

- Nine members, including the Chairman, to represent the public-at-large, and
- Eight members who are either members or employees of the eight Escarpment area county councils or regional councils.

Current members of the Commission responsible for the Proposed Plan are:

Representing the Public-at-Large

Ivor McMullin	Chairman
Robert Bateman	
Leo Bruzzese	
Gary Harron	
Robert Keast	
Bernice Limpert	
Raymond Lowes	
Anne MacArthur	
Lee Symmes	

Representing Counties and Regional Municipalities

Lloyd Adams	Bruce County
Roy Booth	Regional Municipality of Halton
Ivan Buchanan	Regional Municipality of Niagara
Edgar Currie	Simcoe County
Paul Gallagher	Dufferin County
Robert Mackey	Grey County
Robert McNairn	Regional Municipality of Hamilton-Wentworth
Alex Raeburn	Regional Municipality of Peel

Former Commission members include: George R. McCague (chairman), John Boeckh, John Bradshaw, Robert Bush, John Johnstone, Theodore Parker and James Swanborough.

(A biographical sketch of current and former Commission members is contained in Section 5.1)

The first meeting of the Commission was held on November 6, 1973 at Queen’s Park.

Over the past few years the Commission members have met on an average of two days every other week. While their duties were of a part-time nature, they were also involved with Commission related meetings, briefings and site inspections in their respective communities. The Chairman is the only full-time Commission member.

Regular Commission meetings – not including public meetings, presentations to local councils, etc. – were held in:

Barrie	Niagara-on-the-Lake
Burlington	Owen Sound
Campbellville	St. Catharines
Collingwood	Thornbury
Georgetown	Toronto
Hamilton	Tobermory
Kimberley	Virgil
Lincoln	

The Commission is responsible to the Provincial Secretary for Resources Development for the development and production of the Proposed Plan. The Minister of Housing also has certain responsibilities with respect to the interim development control practised by the Commission which has dealt with over 4,000 development permit applications since June 1975. The Ministry of Treasury and Economics provides administrative assistance in accounting, legal, office and library services.

1.7

Advisory Committees to the Commission

Section 4 of The Niagara Escarpment Planning and Development Act states:

"The Minister shall establish two or more advisory committees, consisting of such persons as the Minister appoints, one of which will represent the municipalities in the Niagara Escarpment Planning Area in whole or in part and one of which will be broadly representative of the people of the Planning Area, to advise and make recommendations to the Minister, through the Commission, in respect of the preparation and implementation of the Niagara Escarpment Plan and to perform any other functions given to them by the Minister."*

Accordingly, in late 1976, two committees were formed.

The Regional and County Advisory Committee is composed of elected municipal officials and planners from the four regions and four counties in the Niagara Escarpment Planning Area in addition to the City of Owen Sound.

Louis Parsons, former Chairman for the Regional Municipality of Peel, chaired this Committee until 1979 when he withdrew from public office. Mrs. Anne Jones, Chairman for the Regional Municipality of Hamilton-Wentworth, succeeded him as Chairman.

Members of the Committee include:

- *Regional Municipality of Niagara*
John E. Campbell, Regional Chairman
Alan Veale, Planning Director

- *Regional Municipality of Hamilton-Wentworth*
Anne Jones, Regional Chairman
Douglas Lychak, Planning Commissioner
- *Regional Municipality of Halton*
Jack Raftis, Regional Chairman
Edward R. Cumming, Regional Planning Director
- *Regional Municipality of Peel*
Frank Bean, Regional Chairman
Peter E. Allen, Planning Commissioner
- *County of Dufferin*
Gordon Oldfield, Reeve of Melancthon Township
Connie Broderick, Chairman, Land Division Committee
- *County of Simcoe*
Orville Hughes, former County Warden
William Cooper, Associate Agricultural Representative
- *County of Grey*
Lorne Lemon, former County Warden
Ross Arthur, Planning Director
- *City of Owen Sound*
R. E. Rutherford, Mayor
J. Kent Murray, Planning Director
- *County of Bruce*
Milton Hayes, Reeve of Lindsay Township
Donald Scott, Planning Director

The Interest Groups Advisory Committee is composed of representatives of such diverse interests as real estate, tourism and travel, aggregate, urban development, women's institutes, cottage owners and conservationists. William Powell, Chairman of the Hamilton Region Conservation Authority, is the Chairman and Warren Wiley from the Ontario Federation of Agriculture is the Vice-Chairman.

Members of this Committee include:

- *William Powell*, Hamilton
Chairman's Committee, Conservation Authorities of Ontario
- *Warren Wiley*, St. Catharines
Ontario Federation of Agriculture
- *David J. Sterrett*, Brantford
Aggregate Producers' Association of Ontario
- *Philip R. Gosling*, Guelph
Conservation Council of Ontario
- *Kirk Wipper*, Toronto
Ontario Camping Association
- *Lloyd Thomson*, Orangeville
Niagara and Mid-Western Ontario Travel Association
- *Douglas McLay*, Stokes Bay
Georgian-Lakelands Travel Association
- *Hilde Morden*, Rodney
Federated Women's Institute of Ontario
- *Eric Kennedy*, Islington
The Bruce Trail Association
- *William Sinclair*, Hamilton
The Urban Development Institute
- *William Bell*, London
Ontario Federation of Anglers and Hunters, Inc.
- *Albert O. Shingler*, Toronto
Federation of Ontario Cottagers' Associations
- *Howard Awrey*, Hillsburgh
Ontario Real Estate Association

*The Minister in this instance is the Provincial Secretary for Resources Development.

An additional advisory committee to the Commission, called the Inter-Ministerial Liaison Committee, was established three years earlier in 1973 as a small ad hoc working group to act in a liaison capacity between the Commission and various government ministries.

In addition to a representative of the Provincial Secretariat for Resources Development, ministries represented on this committee include:

- Intergovernmental Affairs
- Treasury and Economics
- Housing
- Natural Resources
- Energy
- Transportation and Communications
- Agriculture and Food
- Environment
- Culture and Recreation
- Industry and Tourism

While having divergent views and opinions on Escarpment protection, all three committees provided the Commission with numerous recommendations, many of which have been incorporated into the Proposed Plan. Their assistance was of much value and their recommendations assisted the Commission in finding the "middle-ground" to produce a workable Escarpment Plan.

1.8

The Niagara Escarpment Planning Area

The Commission began its task faced with the challenge of a diverse 5,200 square-kilometre (2,000 square-mile) Planning Area (1.3 million acres) defined by Ontario Regulation 118/74 of February 26, 1974.

This extremely large area, some of it 16 kilometres (10 miles) from the Escarpment brow, created many problems for the Commission, for the 55 affected municipal councils and for area landowners.

With all of the Bruce Peninsula north of Wiarton in the Planning Area and about half of the Niagara Region, the Commission found itself drawn into a whirlpool of local planning problems. Many of these problems had little or no direct relationship to the Escarpment.

In addition, municipal councils and area landowners had difficulty in comprehending the Commission's interest in lands which did not seem to be physically related to the Escarpment. In many instances, the Commission's planning attempts were viewed as an unwarranted intrusion.

Many people asked how such a large planning area came about.

The Niagara Escarpment was one of a number of planning issues which received attention during the late 1960s and early 1970s. The preservation of agricultural lands, the Niagara fruitlands in particular, was another. Also on the list were the shorelines

of Lake Ontario, Georgian Bay and Lake Huron. It was thought at the time that these should be examined together, if possible.

As a result, the terms of reference for the Gertler Report included, among other things, the following:

- *To delineate the area of the Niagara Escarpment including related lands which should be preserved as a permanent feature of the Ontario landscape and for recreational purposes.*
- *To delineate, in addition, the area of the Niagara Region which should be preserved for agricultural purposes.*

Professor Gertler selected an area extending two miles on either side of the main axis of the Escarpment, defined in relation to its edge or highest contour. This two mile limit was adjusted to include special features of recreational or environmental significance.

Further additions to the boundary resulted from the recommendations of the Inter-Ministerial Task Force set up following the Gertler Report. These were presented in the Government's June 1973 Policy Statement. An opportunity for municipalities, associations and the general public to comment on the boundary was afforded through the public meetings and the written briefs which were solicited by the Task Force.

As a result, the Gertler study area was expanded by the Task Force to include the entire Bruce Peninsula in order that its shorelines and many good harbour areas would receive protection. Study area limits were then "squared-off" to coincide with the nearest concession, lot or municipal boundary.

Following the formation of the Commission in late 1973, the conservation authorities in the Planning Area (Niagara Peninsula, Hamilton Region, Halton Region, Credit Valley, Metropolitan Toronto and Region, Nottawasaga Valley, North Grey Region, Sauble Valley and Saugeen Valley) were invited to comment on the effect of the proposed Planning Area boundary on their respective watersheds. This was carried out in connection with one of the objectives set out in The Niagara Escarpment Planning and Development Act, "*. . . to maintain and enhance the quality and character of natural streams and water supplies*".

Subsequent modifications were made at the request of the Niagara Peninsula, Credit Valley and Nottawasaga Valley Conservation Authorities who proposed that additional parts of their watersheds should be included.

This, then, was the process leading up to the establishment of the Niagara Escarpment Planning Area assigned to the Commission by Ontario Regulation 118/74.

As the Commission worked to develop a plan, it began to seriously question not only the size but the local ramifications of such a large Planning Area.

The Commission soon found itself being drawn into planning controversies which were best dealt with by local authorities rather than by a Provincial Commission and which also seemed unrelated to the objectives of The Niagara Escarpment Planning and Development Act.

In the majority of these cases, the Commission was able to make adjustments and arrive at working arrangements to disentangle itself from certain local planning issues. Nevertheless, the entire area with its many complex problems of urban development, agricultural land, tender fruitland, quarrying, forest development and protection, Great Lakes shoreline development, and environmental protection continued to absorb the resources of the Commission, and its relatively small planning staff.

While the Commission was indeed concerned about the size of the Planning Area, it had extreme difficulty in arriving at conclusions as to where new boundaries should be set. At least the Great Lakes shorelines and the headwaters of streams provided well-defined limits, even though they might be several kilometres from the Escarpment itself. Between these limits and the Escarpment, there were few other obvious locations that could be used as boundaries for a reduced area.

Notwithstanding, the Government of Ontario directed the Commission to produce its thoughts – the Preliminary Proposals – for the entire area described in Ontario Regulation 118/74.

During the preparation of the Preliminary Proposals, and from the ensuing public discussion, it was hoped that more clearly defined factors would emerge which would assist in redefining a new, smaller area closer to the actual Escarpment brow.

The Commission's work in developing the Preliminary Proposals, released in 1978, provided a great deal of information as to what were key Escarpment lands and the most significant ecological areas associated with them.

This work also provided data on the most significant water resource areas associated with the Escarpment, as well as forest areas, points of cultural importance, mineral resource areas and recreational features.

All of this aided the Commission in defining a smaller area which could be maintained under the policies of the Proposed Plan.

The 55 municipalities affected by The Niagara Escarpment Planning and Development Act also commented on what areas under their jurisdiction they considered appropriate for inclusion in a Provincial plan.

Some did not want to see a Provincial plan at all within their municipality, but most seemed to accept the need for a coordinated Provincial plan for the length of the Escarpment and subsequently provided useful input to the Commission.

The result was that the Commission recommended to the Government of Ontario in May, 1978, that the Proposed Plan be prepared for an area approximating the most environmentally sensitive interim Development Control area, established in 1975. This recommendation was accepted. After some months of consultation with municipalities and various interest groups and with considerable field-work and additional research of data, the Commission defined the boundaries of the area to be covered in the Proposed Plan.

This area is 1,923 square-kilometres (742 square-miles), a reduction of 63 per cent of the 5,200 square-kilometre (2,000 square-mile) Niagara Escarpment Planning Area defined by Ontario Regulation 118/74 of February 26, 1974.

When the Plan for the reduced area is finally approved (the Niagara Escarpment Plan), Ontario Regulation 118/74 should be amended accordingly.

1.9

Interim Development Control

In 1973, the Niagara Escarpment Inter-Ministerial Task Force concluded that the present system of controlling land use through zoning by-laws *"cannot provide the kind of control needed in a large, varied and environmentally sensitive area such as the Niagara Escarpment"*.

What was needed, the Task Force pointed out, was a system in which every proposed development would be judged on its own merits and, if found compatible with existing planning policies, would be approved, subject to conditions. This type of plan implementation is known as "development control".

The Government of Ontario accepted this recommendation and later that year approved The Niagara Escarpment Planning and Development Act which includes provisions for a system of plan implementation through development control.

However, there was concern about the amount of development that might take place before a Niagara Escarpment Plan could be completed and adopted by the Government of Ontario.

The solution was to have the Niagara Escarpment Commission undertake what came to be known as interim development control.

A 2,550 square-kilometre (957 square-mile) area of land flanking the 725 kilometre (450 mile) long Escarpment judged at the time to be the most environmentally sensitive area, was selected as the interim development control area.

Development control came into existence on June 10, 1975, by Ontario Regulation 453/75, as amended.

The Commission approached interim development control in the following manner:

1. *If the Commission, on consulting the approved guidelines, concluded that a proposed development would not likely compromise the final plan, it approved a development permit subject to conditions designed to reduce or eliminate any possible adverse effects of the development on the natural and visual environment. Such conditions included landscaping, building location, siting, grading, tree cover, preservation of existing vegetation, etc.*

2. *If the Commission concluded, after a staff report, site inspection, and a summary of municipal concerns, that a proposed development was contrary to the existing guidelines and might run counter to the final plan, it would refuse the development permit. This meant, in effect that the ultimate decision on whether the development should proceed or not was deferred until the plan was completed.*

The Commission found the exercise of interim development control difficult and time-consuming. The majority of development permit applications were for single-family houses on lots which had already been created. By mid-1979 more than 4,000 permits had been dealt with and over 90 per cent of these had been approved subject to conditions.

Applications which had been refused were principally those which did not meet normal municipal or health standards for development, or where the building lot had not yet been created. Other exceptions included lots situated on the Escarpment brow; under-sized lots; lots located on flood plains or other hazard lands; and lots not fronting on a public road.

1.10

The Preliminary Proposals

In February 1978, the Commission's Preliminary Proposals were released.

While the legislation did not specifically require such a document to be prepared, the Commission's view was that its publication and review by the 55 affected municipalities, advisory committees and various interest groups, Provincial Government agencies and Ministries, ratepayers' groups and the general public would be invaluable in developing a sound basis for the Proposed Plan, required by the Act.

Faced with a diversity of local Escarpment area planning, resources and expertise, the Commission in its first draft produced detailed proposals for the original 5,200 square-kilometre (2,000 square-mile) Planning Area assigned to it.

The Proposals consisted of 22 discussion papers, each dealing with a specific land use or issue. The papers were divided into three broad classifications – 11 basic designations, seven overlay designations and four general policy papers.

The basic designations included Forest, Special and Mixed Agriculture, General Rural, Lakeshore, Lakeshore Residential, Mineral Resources, Scarp, Urban, Special Areas, Scenic Drives and the Bruce Trail.

The overlay designations dealt with Cultural, Natural, Scenic, Provincial Acquisition, Scarp Protection, Hazard and Minor Urban Areas.

The general policy papers dealt with Water Resources, Recreation, Transportation and Utilities, and Administration of the Plan.

Reaction to the Preliminary Proposals was mixed.

The Commission received over 160 detailed briefs and submissions in addition to hundreds of letters from Escarpment area residents.

In general, most municipalities were of the opinion that the Planning Area was too large and the Proposals were too complex.

Many municipalities wanted to see control of the Escarpment area returned to local or regional governments.

Some Escarpment area ratepayers' groups categorically rejected the Proposals, the Commission and The Niagara Escarpment Planning and Development Act – in total. Others supported the concept but urged amendments to the Act, less restrictive development control regulations, tax compensation to municipalities where lands are designated for public acquisition, and legal protection for landowners who allowed their property to be used by the public.

Interest groups such as the Conservation Council of Ontario and the Federation of Ontario Naturalists were generally supportive of the Commission's mandate and expressed strong objection to any reduction in size of the Planning Area. The Commission was reminded that many municipal plans were weak in their provisions to preserve the Escarpment; some official plans had yet to be adopted or even drafted; and one county and several municipalities in the Planning Area did not have planning departments.

The Proposals provided a good basis for discussions with municipalities and the public. They screened out ideas which were eventually discarded, and identified those that needed to be reinforced. Most importantly, they laid the ground work for the revised policies and the reduced area covered by this Proposed Plan.

2



2.1

Introduction

The Land Use Policies explain the way in which land shall be used throughout the area of the Proposed Plan. Seven land use designations are described:

Escarpment Natural Areas

Escarpment Protection Areas

Escarpment Rural Areas

Minor Urban Centres

Urban Centres

Escarpment Recreation Areas

Mineral Resource Areas

For each designation, objectives are outlined, followed by the criteria applied in their mapping. The land use designations are shown on Maps 1-9 which are part of this Plan.

The land uses and practices that are appropriate within each designation are listed.

To determine how a specific development should be carried out, Section 2.9, Development Criteria, must be read.

How the Land Use Policies are to be implemented, and by whom, follows in Section 2.10.

2.2

Escarpment Natural Areas

Escarpment features and associated stream valleys, wetlands and forests which are relatively undisturbed are included in this designation. These contain important plant and animal habitats and geological features, and are the most significant natural and scenic areas of the Escarpment. The policy aims to maintain these natural areas. Emphasis is placed on recreational land uses, forest and wildlife management programs.

Objectives

1. To maintain the most undisturbed Escarpment slopes, stream valleys, wetlands and other significant nature areas.
2. To permit compatible recreation and conservation activities.

Criteria for Designation

1. The least disturbed Escarpment slopes based on landforms associated with the underlying bedrock.
2. Where forest lands abut the Escarpment, the designation extends 300 metres (1,000 feet) back from the brow of the Escarpment slope (e.g. Bruce Peninsula).
3. Provincially-significant nature areas.
4. The most significant stream valleys and wetlands associated with the Escarpment.

Permitted Uses

Subject to Section 2.9, Development Criteria, the following uses are permitted:

1. Existing uses.
2. Existing agricultural operations.
3. Single-family dwellings on existing vacant lots but generally only where such development would be compatible with the objectives of this designation.
4. Recreation relating to trail activities, nature viewing and public parks.
5. Forest and wildlife management.
6. Archaeological activities.
7. Essential transportation and utility facilities.
8. Accessory buildings and facilities necessary to support the permitted uses and site modifications required to accommodate them.

New Lots

Subject to Section 2.9, Development Criteria:

1. New lots may be created only for the purpose of correcting conveyances, enlarging existing lots or through acquisition by a public body.

2.3

Escarpment Protection Areas

Escarpment Protection Areas are important because of their visual prominence and their environmental significance. They are often more visually prominent than the Escarpment Natural Areas. The main difference between the two is that the Escarpment Protection Areas have been more subjected to man's influence such as agriculture, residential estate, cottage development or quarrying, etc.

The policy aims to maintain the remaining natural features and their open rural landscape quality. Emphasis is placed on agriculture, forestry and recreation oriented to land rather than buildings.

Objectives

1. To maintain and enhance the open landscape quality of Escarpment slopes.
2. To maintain regionally-important nature areas.
3. To permit compatible agriculture, forestry and recreation.

Criteria for Designation

1. Escarpment landforms where existing land uses have significantly altered the natural environment, (e.g. agricultural lands and residential development).
2. Areas in close proximity to Escarpment landforms which visually are part of a landscape unit.
3. Nature areas which are regionally important.

Permitted Uses

Subject to Section 2.9, Development Criteria, the following uses are permitted:

1. Existing uses.
2. Single-family dwellings.
3. Single-family dwellings accessory to agricultural operations.

- 4. Recreational uses such as golf courses, picnic sites and day-use sites and trail uses oriented towards the land rather than requiring the building of major structures.
- 5. Forest and wildlife management.
- 6. Agricultural operations.
- 7. Archaeological activities.
- 8. Transportation and utility facilities.
- 9. Wayside pits subject to Section 2.8.
- 10. Institutional uses.
- 11. Accessory buildings and facilities necessary to support permitted uses and site modifications required to accommodate them.

Existing Lots

Subject to Section 2.9, Development Criteria:

Development for permitted uses may occur on existing lots generally only where such development would be compatible with the objectives of this designation.

New Lots

Subject to Section 2.9, Development Criteria:

- 1. New lots may be created for the purpose of correcting conveyances, enlarging existing lots, through acquisition by a public body, and for agricultural operations.
- 2. In addition, where no lots have ever been severed, one new lot may be severed for permitted uses per 40 hectares (100 acres) or original township lot. The creation of a lot by a public body from a private holding (e.g. via a road deviation) will not be considered as a previous severance.



2.4

Escarpment Rural Areas

Escarpment Rural Areas are an essential component of the Escarpment corridor, including as they do those lands in the immediate vicinity of the Escarpment. They are the lands abutting the ecologically-sensitive areas and the prominent Escarpment itself. They provide a buffer for these sensitive areas and a frame for the Escarpment scene.

Objectives

- 1. To maintain scenic values of lands in the immediate vicinity of the Escarpment.
- 2. To maintain the open landscape character.
- 3. To permit compatible agriculture and forestry and low-density rural land uses.

Criterion for Designation

Minor Escarpment landforms and lands in the immediate vicinity of the Escarpment necessary to provide an open landscape.

Permitted uses

Subject to Section 2.9, Development Criteria, and the requirements of local official plans and by-laws, the following uses may be permitted:

- 1. Existing uses.
- 2. Single-family dwellings.
- 3. Single-family dwellings accessory to agricultural operations.
- 4. Recreational uses such as serviced campgrounds, golf courses, country clubs, trailer parks and trail uses, provided that any detrimental impact of these uses on the Escarpment's scenic qualities and natural environment is kept to a minimum.
- 5. Forest and wildlife management.
- 6. Agricultural operations.
- 7. Small-scale commercial and industrial development servicing agriculture.
- 8. Aggregate extraction, including wayside pits, subject to Section 2.8.
- 9. Small-scale commercial development related and complementary to permitted recreational areas.
- 10. Archaeological activities.
- 11. Transportation and utility facilities.
- 12. Institutional uses.
- 13. Accessory buildings and facilities necessary to support the permitted uses and site modifications required to accommodate them.

Existing Lots

Subject to Section 2.9, Development Criteria:

Development for permitted uses may occur on existing lots generally only where such development would be compatible with the objectives of this designation.

New Lots

Subject to Section 2.9, Development Criteria:

- 1. New lots may be created for the purpose of correcting conveyances, enlarging existing lots, through acquisition by a public body, and for agricultural operations.
- 2. In addition, where no lots have ever been severed, a maximum of two new lots for permitted uses may be severed per 40 hectares (100 acres) or original township lot. (If one lot has been severed, one new lot is permitted.) The creation of a lot by a public body from a private holding (e.g. via a road deviation) will not be considered as a previous severance.
- 3. Also, new lots may be created by low-density rural plans of subdivision or condominium and other compatible forms of lot ownership.

2.5

Minor Urban Centres

This land use designation identifies those rural settlements – villages and hamlets – that are distributed throughout the area of the Proposed Plan.

Objectives

- 1. To provide concentration points for development in rural areas.
- 2. To maintain the rural heritage of villages and hamlets.
- 3. To generally direct the growth of villages and hamlets away from Escarpment Natural Areas and Escarpment Protection Areas into Escarpment Rural Areas in a logical manner with the least possible environmental disruption.
- 4. To ensure that any growth will be in accordance with an approved municipal official plan and/or secondary plan.

Criterion for Designation

The Minor Urban Centres designation includes the following list of villages and hamlets which are designated in approved or draft local, regional or county official plans:

Alfred Harris Gardens	Inglewood
Balmy Beach	Kilbride
Barrow Bay	Kimberley
Belfountain	Lowville
Campbellville	Massie
Cheltenham	Mono Centre
Colpoys Bay	Mono Mills
Copetown	Mount Nemo
Dunedin	Oxenden
Dyer Bay	Queenston
Eugenia	Singhampton
Glen Cross	Springmount
Glen Huron	St. Davids
Greensville	Terra Cotta
Griersville	Walters Falls
Hornings Mills	Winona
	Woodford

Changes to this list and the designation on Maps 1-9 do not require amendment to the Niagara Escarpment Plan.

Boundaries

The Minor Urban designation is shown by symbol on Maps 1-9 for the Proposed Plan. Boundaries establishing the growth area will be defined by the municipality in an approved local official plan and/or secondary plan which is in conformity with the Niagara Escarpment Plan.

Permitted Uses and New Lots

The range of permitted uses and the creation of new lots will be subject to the following growth objectives as incorporated into approved local official plans and by-laws.

Growth Objectives

- 1. Growth should not extend into Escarpment Natural Areas or Escarpment Protection Areas.
- 2. Growth should be limited so it does not conflict with and destroy the surrounding environment and adjoining agricultural activity. Where appropriate, the provision of adequate setbacks and screening should be required to minimize possible land use conflicts and the visual impact of urban expansion into the surrounding rural landscape.
- 3. Growth should be minor only, relative to the size and capacity of the settlement to absorb new growth, so that the rural heritage of the community is maintained.
- 4. Growth should take place generally as a logical extension of existing development in the form of grouped development rather than linear or scattered development. Expansion in depth rather than extension along existing roads is preferred.
- 5. Growth should be compatible with the conservation, protection and restoration of the community's historical character and archaeological sites, and buildings and sites of architectural and/or historical interest.
- 6. Growth should be compatible with the protection and conservation of unique ecologic areas, wildlife habitats, streams and water supplies and other environmentally sensitive areas, both inside and adjacent to the Minor Urban Centre.

2.6

Urban Centres

This designation identifies urban centres in which the Escarpment and closely-related lands are located. In some centres (e.g. Hamilton) the Escarpment is still largely undeveloped, although surrounded by existing development. In other centres, however, (e.g. Warton), urban growth already has encroached substantially on the Escarpment.

In recognition of the different levels of urban encroachment, the urban centres have been placed in two groups. Each group has its own policies.

Objective

To minimize the impact of urban growth on the Escarpment environment.

Criterion for Designation

Urban development and committed urban areas adjacent to the Escarpment and in some cases covering it.



2.6.1

Urban Group One

Applicable to:

Township of Derby	City of Owen Sound
Town of Dundas	Town of Stoney Creek
Town of Grimsby	City of Thorold
Village of Lion's Head	Town of Warton

Permitted Uses and New Lots

The range of permitted uses and the creation of new lots, where applicable, will be subject to Section 2.9, Development Criteria, and to the growth objectives set out below as incorporated into approved local official plans and by-laws.

Growth Objectives

1. All development should be of an urban design compatible with the Escarpment environment.
2. Adequate public access to the Escarpment should be provided by means of pedestrian trails, including the Bruce Trail.
3. Provisions should be made for open space recreation (such as hiking, cross-country skiing and nature appreciation) and nature conservation compatible with the maintenance of the Escarpment's natural environment.
4. New lots should not be created to include the Escarpment brow, face or slopes, except where such lot creation is for the purpose of correcting conveyances, enlarging existing lots or through acquisition by a public body.
5. Motorized vehicles such as snowmobiles and trail bikes should not be permitted on Escarpment slopes.



2.6.2

Urban Group Two

Applicable to:

Town of Ancaster	City of Hamilton
Township of Flamborough	City of St. Catharines

Within these four urban areas the designation consists of two parts:

A) Areas of Direct Provincial Interest

This includes Escarpment areas within the urban centre. In addition, in the Township of Flamborough, it also includes the area of the former Village of Waterdown which merits designation as a heritage district under The Ontario Heritage Act.

Objectives

1. To maintain the least disturbed Escarpment slopes and Escarpment-related stream valleys.
2. To permit compatible recreation and conservation activities.

Permitted Uses

Subject to Section 2.9, Development Criteria, the following uses are permitted:

1. Existing uses.
2. Single-family dwellings on existing vacant lots but generally only where such development would be compatible with the objectives of this designation.
3. Recreation relating to trail activities, nature viewing and public parks. Motorized vehicles such as snowmobiles and trail bikes shall not be permitted on Escarpment slopes.
4. Forest and wildlife management.
5. Archaeological activities.
6. Essential transportation and utility facilities.
7. Accessory buildings and facilities necessary to support the permitted uses and site modifications required to accommodate them.

New Lots

Subject to Section 2.9, Development Criteria, new lots may be created only for the purpose of correcting conveyances, enlarging existing lots or through acquisition by a public body.

B) Outer Areas

These areas include the built-up areas adjacent to the Areas of Direct Provincial Interest.

Objective

To minimize the impact of urban growth on the Escarpment environment.

Permitted Uses and New Lots

The range of permitted uses and the creation of new lots will be subject to Section 2.9, Development Criteria, and to the following growth objectives as incorporated into approved local official plans and by-laws.

Growth Objectives

1. All development should be of an urban design compatible with the Escarpment environment.
2. Adequate public access to the Escarpment should be provided by means of pedestrian trails, including the Bruce Trail.

2.7

Escarpment Recreation Areas

Designated recreation areas are areas of major existing recreational development generally associated with the Escarpment.

Objectives

1. To provide areas where recreational and associated development can be concentrated around established downhill ski centres.
2. To provide areas where recreational and associated development can be concentrated around established lakeshore cottage areas along Georgian Bay in Grey and Bruce Counties.
3. To include the Provincially-designated Four Season Craigeleith-Camperdown recreation area.
4. To provide for the development of new ski centres or other recreational areas, in the future, which can be accommodated as an amendment to the Niagara Escarpment Plan.
5. To provide areas where marina development and associated development can be concentrated around the mouth of Jordan Harbour.

Criteria for Designation

1. Established ski centres:

Grey County
Beaver Valley
Talisman – Old Smokey
Osler Bluff
Vandeleur

Simcoe County
Devil's Glen

Dufferin County
Aspen
Cedar Highlands
Hockley Hills
Valley Schuss
Montclair

Peel Region
Caledon Ski Club

2. Established lakeshore cottage areas:

Bruce County
Tobermory East
Dunks Bay
Dyer Bay
Cape Chin North Shore
Cape Chin South Shore
Lion's Head North Shore
Lion's Head South Shore
Barrow Bay
Rush Cove
Jackson Cove
Hope Bay
Colpoys Bay North Shore

Grey County
Colpoys Bay South Shore
Balmy Beach

3. The Four Season Craigeleith-Camperdown recreation area (includes ski centres and lakeshore cottage areas) and the Castle Glen recreation area.
4. The established marina area at the Jordan Harbour mouth, Niagara Region.

Permitted Uses

Subject to Section 2.9, Development Criteria, and the requirements of local official plans, the following uses are permitted:

1. Existing uses.
2. In ski centres, facilities such as ski runs, ski lifts, slide rides, toboggan runs, ski chalets, and commercial development such as lodges, retail stores and service establishments associated with the centre.
3. In lakeshore cottage areas, recreational cottages, facilities such as marinas, and commercial developments such as lodges, retail stores and service establishments accessory to the cottage recreational development.
4. In the Craigeleith-Camperdown and the Castle Glen recreation areas, uses as provided for in the Craigeleith-Camperdown and the Castle Glen Secondary Plans.
5. In the Jordan Harbour recreation area, facilities such as marinas and associated commercial development.

New Lots

Subject to Section 2.9, Development Criteria, and the requirements of local official plans, new lots may be created for permitted uses. Preferably residential development should occur on lots or blocks created by registered plans of subdivision or condominium, or other compatible forms of lot ownership.

Official Plans

Local official plans for the designated Escarpment Recreation Areas may be amended without requiring an amendment to the Niagara Escarpment Plan.

2.8

Mineral Resource Areas

The designated mineral resource areas are areas licensed for extraction by the Minister of Natural Resources and in most of which extraction has been underway for some time. With the exception of those cases where some modification of the extraction site plans is required, extraction in these areas may proceed to completion. Also included in this designation are four areas which the Commission considers acceptable for future extraction, and which are in the process of being licensed. Other mineral resource areas may be designated in the future as set out in these policies.

Objectives

1. To designate areas where mineral extraction operations will be permitted to continue, subject to modification of extraction site plans and/or licences where this may be required.
2. To provide for the designation of new mineral resource areas which can be accommodated by an amendment to the Niagara Escarpment Plan.

Criteria for Designation

1. Existing licensed areas.
2. New licensed areas approved within the area of the Niagara Escarpment Plan.
3. Cheltenham Brick Works owned by Ministry of Natural Resources, Caledon Municipal Pit, Peel Region; and extensions to the E.C. King Quarry, Grey County and the Queenston Quarry, Niagara Region.

New Licences

Subject to Section 2.9, Development Criteria, the following policies apply:

1. New licensed areas producing less than 20,000 Tonnes (22,000 tons) annually may be permitted in the Escarpment Rural Areas.
2. New licensed areas producing more than 20,000 Tonnes (22,000 tons) annually may be permitted in Escarpment Rural Areas subject to an amendment to the Niagara Escarpment Plan.
3. Wayside pits may be permitted in Escarpment Protection and Escarpment Rural Areas subject to the procedures of The Pits and Quarries Control Act, 1971, or its successor and the Ministry of Transportation and Communications Wayside Pit Criteria.
4. Limited expansion of the few existing small sandstone quarries may be permitted in all designations provided that production is less than 20,000 Tonnes (22,000 tons) annually.

Accessory Uses

Subject to Section 2.9, Development Criteria, accessory buildings and facilities necessary to support the mineral extraction operation may be permitted. Examples of accessory buildings and facilities include offices, crushing and washing facilities, and asphalt plants.

Screening During Extraction

As a condition of the licence, effective measures shall be taken to screen the extractive operation while it is in progress, in a manner compatible with the surrounding visual environment.

Rehabilitation

1. Wherever possible, rehabilitation shall be progressive as the extraction proceeds. Where it is not practical to rehabilitate immediately to the planned after-use, interim rehabilitation shall occur.
2. The after-use of the excavated area shall be compatible with surrounding uses and the objectives of the Niagara Escarpment Plan.

Existing Licensed Areas

The proposed Aggregates Act requires that existing licensed areas under The Pits and Quarries Control Act be relicensed under the new Act.

During the relicensing of pits and quarries under the new legislation, the Minister of Natural Resources, in consultation with the implementing body, shall adjust the licences and/or the site plans to ensure minimum disruption to the environment.

The aim will be to protect the following:

1. The Escarpment and contiguous forests.
2. Environmentally sensitive areas as identified by the Ministry of Natural Resources, conservation authorities and municipalities.
3. Other areas of environmental concern such as sensitive ground and surface water areas.
4. Sensitive archaeological areas as identified by the Ministry of Culture and Recreation.

2.9

Development Criteria

The development criteria are to be applied to all development within the area of the Niagara Escarpment Plan. These criteria deal with development in a variety of situations and, therefore, all the criteria will not apply to every development. The implementing body, when considering development applications, may apply additional criteria.

2.9.1

Existing Uses

The objective is generally not to disrupt existing uses. The exception occurs with certain mineral extraction operations where modification of some existing licences may be required.

1. All existing uses may continue except for those mineral extraction operations where site plans for existing licences issued under the provisions of The Pits and Quarries Control Act, 1971, are modified as a result of its successor.
2. An existing use, building or structure may expand or change in use when it can be sufficiently demonstrated that the objectives of the applicable designation of the Niagara Escarpment Plan are met.
3. Where an existing use has a substantial ecological or visual impact, the property owner shall be encouraged to bring the use into closer conformity with the objectives of the applicable designation of the Niagara Escarpment Plan.
4. A building or structure may be rebuilt in the same location, of the same exterior size and use, provided municipal requirements are met.

2.9.2

Development on Existing Lots

The objective is to permit reasonable enjoyment by the owners of all existing lots that can sustain development.

1. Permitted uses may be allowed on existing lots subject to the following:
 - a) The inherent long-term capacity of the site can support the use without substantial negative impact on the natural environment and the visual qualities of the cultural landscape.
 - b) The cumulative impact of this and other development will not have serious detrimental effects on the natural environment.
 - c) The site is not considered hazardous to life or property due to unstable soil conditions or possible flooding.
 - d) Development on the lot would otherwise meet relevant municipal, health and servicing requirements.
2. Where an application made to develop a vacant lot legally existing on the date of approval of this Plan, is not in conformity with the objectives of the particular designation and:
 - Development on the lot would otherwise meet relevant municipal, health and servicing requirements and is not considered to be hazardous to life or property due to unstable soil conditions or possible flooding,
 - the Government of Ontario will:*
 - At the request of the owner enter into negotiations to purchase the lot at a fair market value, which may be determined by the Land Compensation Board;
 - Enter into other agreements (e.g. scenic or conservation easements) acceptable to the owner and the Government which would compensate the owner for not developing;
 - If in one year after the receipt of the application the Government of Ontario does not wish to purchase or the process fails, the application will be approved.
3. Where a lot is located in more than one designation, development should be located on that portion of the lot located in the least restrictive designation.
4. Private sewage systems and water supplies associated with permitted uses require the approval of the Ministry of the Environment or its agent, the local Medical Officer of Health or the authority having jurisdiction in these matters.
5. All permitted uses established must be consistent with municipal regulations.
6. Single-family dwellings are limited to one per lot unless the residential use is accessory to agriculture in which case the criteria relating to agricultural uses may apply.
7. Any development permitted should be designed and located in such a manner as to preserve the natural and visual characteristics of the area.

2.9.3

Lot Creation

The objective is to direct the formation of new lots to those locations that are the least environmentally sensitive.

1. New lots to meet residential needs should be created primarily in designated Minor Urban and Urban Centres.
2. New lots to provide recreational opportunities should be created primarily in designated Escarpment Recreation Areas and in some Minor Urban Centres.
3. Ribbon or strip development should be prevented.
4. New lots should be located and be of a size appropriate to the use and the objectives of the designation.
5. Lot creation within Urban Centres, Minor Urban Centres, and Escarpment Recreation Areas, will be subject to the requirements of local official plans.
6. In Escarpment Rural Areas, new lots may be created by a limited number of low-density rural plans of subdivision or condominium as provided for in local official plans. These will be located and designed in such a manner, and be of such a size and density, that the open rural landscape character is retained and natural and cultural features are protected. The "Rural Estate Guidelines" published by the Ministry of Housing shall be used for the location and design of these subdivisions. Prior to approving a rural estate development, the implementing body shall consider: the number, distribution and density of existing vacant lots in the area; the additional lots that may be created; and, the consequences of development of all of these lots on meeting the objectives of this designation.
7. The creation of new lots should be compatible with the requirements of the Agricultural Code of Practice.
8. Public bodies and private persons are encouraged to consolidate existing vacant lots to establish new lots of such a size as to permit uses consistent with the objectives of the designation in which they are located.

2.9.4

New Development Adjacent to Streams, Lakes and Wetlands

The objective is to ensure that new development, adjacent to streams, lakes and wetlands will have a minimum effect on water quality.

1. *Water Quality*

a) Changes in the natural drainage should be avoided.

b) No sewage system shall be allowed closer than 30 metres (approximately 100 feet) from:

- The high water mark of any lake.
- The top of a stream bank or ravine.
- The edge of any wetland.

c) A setback for development will be established from each side of a stream, riverbed, lakeshore or wetland, necessary to maintain existing water quality. The width of this buffer shall be determined by the Ministry of the Environment, conservation authority or the Ministry of Natural Resources, which shall consider:

- Soil type.
- Types and amount of vegetation cover.
- Slope of the land.

d) No alteration of the natural grade or drainage shall occur within the setback where in the opinion of the implementing body such action would adversely affect surface and ground water resources.

e) Where in the opinion of the implementing body a potential ground or surface water pollution problem exists, the applicant shall detail through appropriate studies, the detrimental effects and how they will be minimized.

f) The cutting of trees within the setback is regulated by the forestry management criteria (Section 2.9.9).

g) The following sediment and erosion control practices should be carried out:

- Only the smallest practical area of land should be exposed at any time during the development.
- When land is exposed during development, the exposure should be kept to the shortest practical period of time.
- Natural features such as tree groves, grades and waterways should be preserved.
- Temporary vegetation and/or mulching should be used to protect critical areas exposed during development.

- Final landscaping and vegetation should be installed as soon as is practical following completion of the development.
- Top soil should not be removed from the site but rather should be stored and redistributed as a suitable base for seeding and planting.
- Sediment basins should be installed to remove sediment from runoff-water from lands undergoing development. Provisions should be made to accommodate increased runoff due to changed soil surface conditions during and after development.

2. *Water Supply*

When permitted uses require a water supply, its availability and potability shall be to the satisfaction of the municipality, Ministry of the Environment and the local health unit.

3. *Floodplains*

No building or structure shall be permitted in identified floodplains except where the building or structure has been approved by the municipal council, the conservation authority, or the Ministry of Natural Resources in accordance with established floodplain management and development criteria.

2.9.5

New Development Adjacent to Ravines

The objective is to ensure that new development adjacent to ravines does not result in environmental damage, or in unsafe situations.

1. The crest of the ravine shall be established by a site inspection by the implementing body and this line will be plotted on the proposed development plans.
2. A minimum building setback will be established by the implementing body from the crest of a ravine and no disturbance of grades or vegetation below the crest shall occur.
3. An engineering report shall be prepared by the applicant if the existing or future stability of the bank is in question.
4. Structures of any kind should not be placed on slopes in excess of 25 per cent (1 in 4 slope).
5. During development a screen of appropriate fencing material (e.g. snow fencing) should be established approximately 3.0 metres (10 feet) from the crest of the slope in order to prevent any dumping.
6. The setback requirement for unstable slopes should be equal to a distance three times the vertical depth of the ravine, measured from the toe of the slope. A further setback may be required if unusual circumstances exist (e.g. unusual soil conditions).
7. The setback may be reduced if the unstable bank is stabilized to the satisfaction of the implementing body. In this connection, the applicant may be required to engage the services of a qualified engineer.

2.9.6

New Development Within Wooded Areas

The objective is to ensure that new development should preserve as much as possible of wooded areas.

1. Disturbance of treed areas should be minimized, and proposed developments in heavily-treed areas shall have site plan agreements containing specific management details regarding the protection of existing trees.
2. Trees to be retained should be protected by means of snow-fencing, wrapping, or other acceptable means during construction.
3. Existing tree cover or other stabilizing vegetation will be maintained on slopes in excess of 25 per cent (1 in 4 slope).

2.9.7

Agriculture

The objective is to protect lands with a high agricultural capability.

1. Municipal official plans are expected to apply The Food Land Guidelines (1978) of the Ministry of Agriculture and Food. Therefore, on Class 1 to 4 agricultural lands as identified by a municipality in its official plan or by-laws, the lot creation policies of Escarpment Protection and Escarpment Rural Areas are replaced by the lot creation policies of The Food Land Guidelines.
2. Farm-related buildings, including one farm residence, may be established on viable farm units. Viability will be determined in consultation with the Ontario Ministry of Agriculture and Food.
3. Municipal official plans may permit an additional dwelling, accessory to the farm operation. This is for a member of the farm family or farm help engaged full-time on the farm. Such a dwelling should be located within the farm cluster and a separate lot shall not be created for it.

2.9.8

Heritage

The objective is to maintain the area of the Niagara Escarpment Plan as an important heritage resource.

1. Care shall be taken to preserve known archaeological sites (especially native burial sites) or areas where such sites might reasonably be expected to exist.
2. Existing cultural landscapes and properties compatible with the goal and objectives of the Act should be retained and reused. To determine whether such actions are feasible, consideration shall be given to both economic and social benefits and costs.
3. In built-up areas, development as infilling or expansion should be in harmony with the area's character and existing buildings in general mass, height and setback, and in the treatment of architectural details, especially on building facades. The following should be avoided:
 - Development that fails to observe the general mass, height and setback of surrounding buildings.
 - Development that is of such markedly contrasting form as to represent a very discordant component in the immediate area.
4. In the countryside, development should be in harmony with the character of the surrounding landscape in terms of siting, scale and materials.
5. The design of subdivisions should be in harmony with the orientation and division of lots characteristic of the existing pattern of the cultural landscape.
6. Where developments involving new roadways, road improvements or service corridors are permitted, their design and alignment should be in harmony with the cultural landscape.
7. Where development replaces a former use, it should express the former use in some way. This may include one or more of the following:
 - Preservation and display of fragments of the former building features and landscaping.
 - Marking the traces of former locations, shapes and circulation lines.
 - Displaying graphic and verbal descriptions of the former occupation.
 - Reflection of the former architecture and plan in the new development.
8. Where development will destroy or significantly alter cultural landscapes or cultural properties, actions should be taken to salvage information on the features being lost. Such actions could include, for example, archaeological salvage excavation, and the recording of buildings or structures through measured drawings or photogrammetry.

2.9.9

Forest Management

The objective is to maintain and enhance the forests and the animal and plant habitats.

1. All cutting of trees requires permission from the implementing body with the following exceptions:
 - a) Where existing agreements between public authorities, and between public authorities and private persons contain provisions relating to the cutting of trees.
 - b) Where there are specialized tree crops, such as Christmas tree farms or nurseries, where clear cutting or removal and replanting is a normal part of the operation.
 - c) Where the owner cuts for his own domestic, non-sale purposes.
 - d) Where trees create a hazard.
 - e) To facilitate approved permitted uses.
2. Permission to cut is conditional upon:
 - a) Using tree cutting methods designed to minimize adverse effects on the natural environment, including surface and groundwater resources.
 - b) Minimizing disruption of habitats for plants and animal species occurring in the area.
 - c) Retaining the diversity of tree species.
 - d) The extent of cutting at any one time, or over a period of time, should not substantially change the external or internal appearance of the forest.
 - e) Minimum cutting within highly sensitive areas such as steep slopes, unstable soils, stream valleys, and areas of high groundwater infiltration.
3. All public authorities shall require permission from the implementing body before entering into any new agreement involving the cutting of trees.
4. Reforestation using native tree species shall be encouraged by both Provincial and municipal authorities, particularly in areas of shallow and unstable soils, steep slopes, stream valleys and headwaters and infiltration areas critical to the maintenance of the quality of natural streams and water supplies.
5. Final rehabilitation of any tree-cutting program should include reforestation where necessary.
6. Where the conditions of a municipal tree-cutting by-law are more restrictive than the policies of this Plan the conditions of that by-law shall apply.

1. All new transportation and utility facilities shall be so designed and located as to minimize the impact on the natural and cultural environment, and be consistent with the objectives of this Plan.
2. New transportation and utility facilities should avoid Escarpment Natural Areas.
3. All such facilities will be subject to the provisions of The Environmental Assessment Act and its regulations. Works which are exempted from the provisions of that Act will require permission to proceed from the implementing body, with the following exceptions:
 - a) The maintenance or renewal of public roads.
 - b) The construction, erection, installation or renewal of lanes, sidewalks, curbs, gutters, street signs and street lights on public roads exempted under Provincial regulations enacted under The Niagara Escarpment Planning and Development Act.
 - c) The maintenance or renewal of sewers, water mains, pipes, cables or other apparatus connected with public utilities within public rights-of-way or easements.
 - d) Other classes of public works of a nature and scale similar to those defined above which are specifically exempted under Provincial regulations enacted under The Niagara Escarpment Planning and Development Act.

2.9.11

Recreation

The objective is to minimize any adverse impact of recreational activities on the natural and cultural features.

1. All recreational activities should be designed and located to fit into the natural and cultural character of the area.
2. Intensive recreational activity is intended to occur primarily in the designated Escarpment Recreation Areas, and in the public parks established for this purpose.
3. Recreational development should not exceed the carrying capacity of the site.
4. Snowmobile and other motorized vehicle trails will be designed and located so as not to adversely affect adjoining private landowners and the environment. Deer-wintering yards, other important ecological areas and nature reserve zones in parks, shall be avoided.

2.9.10

Transportation and Utilities

The objective is to locate and design new and expanded transportation and utility facilities so the least possible change occurs in the environment and the natural and cultural landscape.

5. The Bruce Trail and other trails shall avoid the most sensitive ecological areas.
6. Where existing trails are in locations that cause environmental deterioration, relocation to a less critical location shall be encouraged.
7. Trail planning, construction and maintenance should be carried out in accordance with the Parks Canada Trail Manual.

2.9.12

Escarpment Recreation Areas

The objective is to permit recreation and associated development which is compatible with the goal and objectives of the Act.

1. Except for infilling on partially-completed subdivision plans approved under The Planning Act, development on prominent Escarpment slopes shall be limited to those recreational facilities such as ski runs, ski lifts or slides which require the slopes for the proper functioning of the operation.
2. Lakeshore cottage areas may extend inland to permit new development in a planned group provided that it does not encroach upon the Escarpment Natural Areas designation and does not exceed approximately 200 metres (650 feet) in depth measured from the high water mark.
3. Within lakeshore cottage areas, where proposed lots within a subdivision have no lake frontage, provision shall be made, prior to registration, for public lake frontage as part of or adjacent to the subdivision.

2.9.13

Mineral Resources

The objective is to minimize the impact of new mineral extraction operations and accessory uses on natural and cultural features.

1. Extraction licences, including wayside pit permits, granted shall have regard to:
 - a) The protection of sensitive ecologic, geologic, historic and archaeological sites or areas.
 - b) The protection of surface and ground water resources.
 - c) The maintenance of good agricultural land as defined in The Food Land Guidelines (1978).
 - d) The protection of existing or approved residential development.
 - e) The preservation of the natural and cultural landscapes as much as possible during extraction and after rehabilitation.
 - f) Ensuring that both the primary extractive and accessory operations are regulated so as to minimize the adverse impact on surrounding residents.
2. No extraction shall take place at any point nearer to the natural edge of the Escarpment than 200 metres (600 feet) measured horizontally or any greater setback required by the implementing body.

2.10

Implementation of Land Use Policies

The Niagara Escarpment Plan will be the approved document resulting from the hearings and recommendations on the Proposed Plan.

2.10.1

Relationship to Local Official Plans and By-laws

If a municipal official plan or by-law is more restrictive than the Niagara Escarpment Plan, that plan or by-law shall be deemed not to be in conflict if it conforms with the general intent and purpose of the Niagara Escarpment Plan.

The Niagara Escarpment Planning and Development Act includes the following provisions:

1. Undertakings by municipalities, local boards and Provincial Ministries shall not conflict with the Niagara Escarpment Plan (Section 13(1)(a)).
2. Local official plans and zoning by-laws shall not be in conflict with the Niagara Escarpment Plan (Section 14).
3. Grants may be made to municipalities towards the costs of preparing proposals to resolve conflicts between local plans and zoning by-laws and the Niagara Escarpment Plan, or to prepare and adopt a local plan or pass zoning by-laws where none are now in effect (Section 19).

2.10.2

Land Use Control – Implementation

Development control as authorized by The Niagara Escarpment Planning and Development Act is the preferred method of land use control for most of the area of the Proposed Plan. Zoning, as authorized by The Planning Act, is an optional method of land use control which may be preferred by municipalities for Urban Centres, Minor Urban Centres and Escarpment Recreation Areas.

Development control may be supplemented by municipal zoning by-laws under The Planning Act or by-laws under The Municipal Act where it is desirable to have uniform application of certain matters throughout a municipality, e.g. regulation of overnight camping, keeping of animals, etc.

The Niagara Escarpment Planning and Development Act makes provision for the delegation of authority to issue development permits to a county or regional municipality or to a city outside a regional municipality, or the Niagara Escarpment Commission. Therefore, the "implementing body" referred to in this Plan may be, for any particular area, either the county, the regional municipality, the city, or the Niagara Escarpment Commission, or the Minister, depending on the delegation made for that area.

2.10.3

Amendments to the Niagara Escarpment Plan

Section 12 of The Niagara Escarpment Planning and Development Act provides that an amendment to the Niagara Escarpment Plan may be initiated by the Minister or by the Commission. Application may be made by any person, ministry or municipality requesting an amendment to the Plan.

2.10.4

Review of the Niagara Escarpment Plan

Section 17 of The Niagara Escarpment Planning and Development Act provides that not later than five years from the day on which the Niagara Escarpment Plan comes into effect the Minister shall cause a review of the Plan to be undertaken.

Escarpment Parks
and Acquisition Policies

3



Francis
Lake

NIV

ADU

ALU

Creek

Mud

Creek

The Long
Swamp

3.1

Past Acquisition Programs

The development of public parks along the Escarpment has been going on for many years, but not as part of a coordinated program.

Following the Gertler Report, the Government of Ontario set about acquiring Escarpment lands. Between January, 1968, and the end of 1972, 8,100 hectares (20,000 acres) of Escarpment land had been bought at a cost of almost \$7 million. Grants to conservation authorities were increased from 50 per cent to 75 per cent of the cost of the land, to encourage acquisition of key Escarpment lands.

There are now 16,900 hectares (41,650 acres) of Escarpment lands owned by the Ministry of Natural Resources and 9,060 hectares (22,400 acres) owned by conservation authorities. Although not part of the program, there are an additional 5,060 hectares (12,500 acres) owned by other public authorities. The total is 31,000 hectares (76,550 acres). The achievement is substantial.

During the past few years, however, Government financial constraints have slowed Escarpment land purchases. The Ministry of Natural Resources eventually reduced the grants to conservation authorities by stages from 75 per cent to 50 per cent, a move which virtually stopped further Escarpment purchases by these authorities. Funds also ceased to be available for direct Ministry purchases. This slow-down created serious problems for the Commission in its effort to regulate development being proposed for lands which had been earmarked for future public acquisition. It created a hardship for some landowners.

A modest acquisition program has now been resumed by the Government.

In the area now covered by the Proposed Plan, Gertler had recommended acquisition in various forms for a total of 32,200 hectares (79,600 acres).

In January 1972, a land acquisition report by M.D. Kirk and E.G. Wilson of the Ministry of Natural Resources expanded on the Gertler land acquisition proposals and provided the guidelines for most of the subsequent program of the Ministry and the conservation authorities. The program proposed the eventual acquisition of 48,400 hectares (119,600 acres) by the Ministry and 25,700 hectares (63,500 acres) by the conservation authorities. Subsequent studies reduced this to 39,300 hectares (97,000 acres) for the Ministry and 20,600 hectares (51,000 acres) for the conservation authorities.

The Ministry and the conservation authorities identified, from local knowledge and the best technical information available at the time, those natural and cultural areas which they recommended should be in public ownership and those undeveloped areas offering high potential for future recreation parks. Although further study has revealed that a few areas were acquired which could now be sold or exchanged for higher priority lands, the Commission considers that the originators of this acquisition program performed a valuable service to the people of Ontario.

There remains the task of refining the program based on the more complete information acquired during the course of the Commission's work, of continuing the acquisition where gaps occur, and of completing the development of the lands now publicly-owned to make up a Niagara Escarpment Parks System.

3.2

The Niagara Escarpment Parks System

The Niagara Escarpment Parks System will involve the continued cooperation of eight conservation authorities and the Ministry of Natural Resources. This Parks System is intended to preserve the sensitive natural and physical Escarpment environment, while providing recreation and public access to one of Canada's most scenic landforms.

The System is composed of lands currently owned by the Ministry of Natural Resources, Sauble Valley Conservation Authority, North Grey Region Conservation Authority, Nottawasaga Valley Conservation Authority, Metropolitan Toronto and Region Conservation Authority, Credit Valley Conservation Authority, Halton Region Conservation Authority, Hamilton Region Conservation Authority and Niagara Peninsula Conservation Authority. Lands proposed for acquisition are also included (Section 3.4).

It also includes the Public Open Space of the Escarpment Link of the Parkway Belt West Plan.

Map B of this Plan shows the 116 proposed and existing Escarpment Area Parks (Section 3.7).

3.2.1

Objectives

The objectives for Provincial Parks as outlined in the "Ontario Provincial Parks Planning and Management Policies, 1978" published by the Ministry of Natural Resources are suitable for the Niagara Escarpment Parks System. As applied to the System these are:

1. To maintain in public ownership locally and regionally-significant elements of the natural and cultural landscape of the Escarpment area.

2. To provide outdoor recreation opportunities along the Escarpment ranging from high-intensity day-use, especially near urban centres, to low-intensity uses in as near a wilderness setting as possible.
3. To provide public opportunities for exploration and appreciation of the outdoor natural and cultural heritage of the Escarpment area.
4. To serve the residents of and visitors to Ontario who are discovering and experiencing the distinctive Escarpment region of the Province.

3.2.2

Organization

The Niagara Escarpment Parks will form a sub-system within the overall Provincial Parks system. The function is to provide public access to the Escarpment. In so doing, the Niagara Escarpment Parks System provides a diversity of recreation experiences while preserving natural and cultural features.

The Niagara Escarpment Parks System is based on feature areas which are publicly-owned or proposed for acquisition. Feature areas are waterfalls, distinctive landforms associated with the Escarpment and unique plant and animal habitats. Cultural and archaeological sites associated with these features are often located within these parks.

Where feature areas are close together, they have been grouped to form clusters of publicly-owned parks.

The linear nature of the Niagara Escarpment Parks System provides opportunities for trail-oriented recreation, cultural and nature interpretation. The Bruce Trail can be firmly established on public lands along with associated parking, back-country camping and interpretation facilities.

The clusters of parks can play an important role in providing regional recreation opportunities. For example, the Dundas Valley cluster provides recreation opportunities for the Hamilton area.

Within the clusters, certain parks play a distinctive role. In Cyprus Lake Provincial Park, the parking, camping and interpretative facilities make it a starting place to explore the other parks in the cluster. This design concept is used to develop the potential of each cluster of parks. One park within each cluster is designated as the key staging area and interpretative centre (Section 3.7).

Because most of the clusters are located within conservation authority watersheds, the Commission recommends that these authorities should play an important role in implementing the proposed Niagara Escarpment Parks System.

3.2.3

Park Classification

Each public park in the Niagara Escarpment Parks System, whether managed by the Government of Ontario or by a conservation authority, is assigned a park classification for its use, development and management. This classification has been based on the predominant characteristic of the park and on the appropriate portions of "Ontario Provincial Parks Planning and Management Policies, 1978" published by the Ministry of Natural Resources.

The park classifications are:

Nature Reserve Parks are the least disturbed parks containing the most natural habitats. These are the areas which are predominantly made up of the identified Provincially-significant nature areas. These areas are intended to remain in as close a wilderness state as possible, therefore, activity will be limited to trail development and viewing. Scientific research and educational instruction may occur. Access to these areas will be limited.

Natural Environment Recreation Parks are areas of particular recreational, historical and natural interest. Recreation uses shall be of moderate intensity and shall include trails, viewing, interpretation, camping, scientific and educational uses. Revegetation, erosion control and the re-introduction of native plant and animal species should occur in order to restore these lands to an evolving natural succession. Access points shall be provided for moderate intensity recreation opportunities consistent with the capability of the site. Special attention shall be given to historical preservation and interpretation of the cultural traditions of the Escarpment area.

Intensive Recreation Parks are intended to provide areas for intensive recreation on public lands. A full range of recreational possibilities may be provided, ranging from camping and water-based recreation to downhill skiing. Easy access and large-scale services, either privately or publicly-operated, should be available to support the activities.

3.2.4

Guidelines for Park Master Plans

Master plans shall be required for the development of the Niagara Escarpment Parks System. They will be prepared by the Ministry of Natural Resources or the appropriate conservation authority. Such plans are now required by The Parks Act for Provincial parks and by The Conservation Authorities Act for conservation authorities' parks. The parks will be divided into zones which reflect different characteristics and types of use. They will be, in effect, multi-use parks although they are assigned a classification reflecting their predominant characteristic. The guidelines are as follows:

1. The "Master Planning Policies" and "Development and Management Policies" sections of each related parks class, as set out in "Ontario Provincial Parks Planning and Management Policies, 1978", shall apply.
2. Park master plans shall conform to the parks classification and the land use policy designations of the Niagara Escarpment Plan.
3. Park master plans will zone the parks and, where appropriate, will include Nature Reserve Zones to protect significant nature areas. Within these Nature Reserve Zones, no mechanized trail vehicles will be permitted or provided for with the exception of those vehicles required for maintenance or emergencies and no tree cutting will be permitted except for wildlife management purposes.
4. Within each master plan, provision shall be made for monitoring and evaluation to assess the effectiveness of the classification and its implementation. This should include:
 - a) *Information Gathering* – Information on the environment of the park shall be gathered to develop an ongoing environmental monitoring program.
 - b) *Indicators* – Indicator plant and animal species are to be identified to assess environmental changes. Environmental conditions (e.g. water quality, erosion rates) will also be monitored.
 - c) *Trail Monitoring* – Trail management will include provisions for monitoring conditions on trails within the park.
 - d) *Annual Report* – A Niagara Escarpment Parks System Annual Report shall be coordinated and published by the Ministry of Natural Resources. This Report will summarize the results of monitoring undertaken in the previous year, evaluate the environmental health of the parks, redirect monitoring programs as required, and recommend corrective measures etc.
5. The Bruce Trail route through the parks shall be designated as the Bruce Trail corridor and managed in conjunction with the Bruce Trail Association.
6. Amendments to the Parks classification will not require an amendment to the Niagara Escarpment Plan.

3.3

The Bruce Trail

The Bruce Trail is an essential component of the Niagara Escarpment Parks System – linking parks, natural features and the Escarpment.

Where the route of the Bruce Trail has been changed by the cessation of existing informal agreements, a new route shall be stabilized by negotiation of trail easements or other agreements with landowners or, if preferred by landowners, by purchase of trail strips at suitable locations, such as on the borders of properties.

The determination of these new routes of the Trail will be the result of a consultative process involving landowners, municipal councils, the Bruce Trail Association and the Government of Ontario. The aim will be to work out, through cooperative effort, the best possible trail location for all concerned which could then be secured from willing landowners by easement or purchase.

The Government of Ontario shall negotiate an agreement with the Bruce Trail Association for the effective management of the Trail. This agreement shall include provision for litter clean-ups, use of trail wardens, maintaining good landowner relations, public information and trail development.

3.4

Future Acquisition

All lands which are currently desirable additions to the Niagara Escarpment Parks System have been assigned a priority. The priority was arrived at by use of a scoring system based on: location with respect to the Escarpment; significance of plant and animal habitats; geological significance; archaeological or historical significance; and scenic quality (e.g. presence of waterfalls or viewpoints, lakeshore location, suitability for the Bruce Trail, and susceptibility to development pressures).

A cut-off point was applied to limit the acreage to that which might reasonably be acquired during the next five years.

The resulting priority list contains mainly those areas where some public acquisition has already occurred. The acquisition proposed consists of filling in the gaps and rounding out the areas. In some locations, there is a requirement for considerable expansion of existing public holdings.

The priority list also contains some areas where there has been no previous public acquisition. The acreage proposed initially for acquisition in these areas may be reassessed later as acquisition priorities are revised.

The acquisition program should be completed in five years and funded at the rate of at least \$5 million per year. Wintario should be used as a source for park acquisition funds.

Because of the high proportion of some townships that will be taken up by parks, the present grants in lieu of taxes should be reviewed.

All acquisitions are intended to occur only when landowners express a willingness to sell or to donate their property to a public authority.

Excluding acquisition that may be required for the Bruce Trail, the priority list for future park acquisition is as follows:

Priority	Park	Approximate hectares (acres) to be acquired
1.	<i>Tobermory Islands</i> , Bruce County (Flowerpot Island now in public ownership)	1,200 hectares (2,950 acres)
	<i>Cave Springs</i> , Niagara Region (Some initial public acquisition now being negotiated)	200 hectares (500 acres)
	<i>Scott's Falls</i> , Dufferin County (Filling in gaps in present acquisition)	270 hectares (675 acres)
	<i>Cabot Head Area</i> , — includes Little Cove and Dunks Point, Bruce County (Filling in gaps and rounding out present acquisition)	5,150 hectares (12,745 acres)
	<i>Pretty River Valley</i> , Grey County (Rounding out present acquisition)	380 hectares (950 acres)
2.	<i>Skinner Bluff Area</i> , Grey County (Rounding out present acquisition)	400 hectares (1,000 acres)
	<i>Cape Dundas Area</i> , Bruce County (New area for public acquisition)	300 hectares (750 acres)
	<i>Lavender Falls</i> , Dufferin and Simcoe Counties (Filling in gaps and rounding out present acquisition)	260 hectares (650 acres)
	<i>Old Baldy</i> , Grey County (Rounding out present acquisition)	400 hectares (1,000 acres)
	<i>Lion's Head</i> , Bruce County (Rounding out present acquisition)	10 hectares (30 acres)

3.	<i>Kemble Mount/ Gowan Lake</i> , Grey County (Rounding out present acquisition)	1,130 hectares (2,800 acres)
	<i>Kelso/ Crawford Lake</i> , Halton Region (Rounding out present acquisition)	120 hectares (300 acres)
	<i>Mount Nemo</i> , Halton Region (Rounding out present acquisition)	50 hectares (125 acres)
	<i>Beaver Valley Lowlands (Hogg's Falls area)</i> , Grey County (Rounding out present acquisition)	990 hectares (2,450 acres)
	<i>Peel South (Credit Forks)</i> , Peel Region (New area for public acquisition)	700 hectares (1,725 acres)
	<i>Colpoy Range</i> , Grey County (Rounding out present acquisition)	8 hectares (20 acres)

The total is approximately 11,568 hectares (28,670 acres).

The Bruce Trail does not appear on the preceding priority list. The scoring system applied to specific park locations could not be applied to the Bruce Trail because of its linear nature. The Trail is assigned a special priority, recognizing that it is an essential component of the Parks System and that opportunities for acquisition may occur at random. When the opportunity occurs to acquire a section of the Bruce Trail, the acquisition of that section assumes top priority for the allocation of funds. The estimated total acreage of land left to be acquired for the Trail based on approximately 15.1 hectares per kilometre of trail (~~60 acres per mile~~), either as trail easements or outright purchases, is approximately ~~7,200~~ hectares (~~18,000 acres~~).

720 1,800

1.5
6.0

3.5

Role of the Ministry of Natural Resources

The Ministry of Natural Resources shall coordinate the development and administration of the Niagara Escarpment Parks System.

3.6

Methods of Land Acquisition

Land acquisition for the Niagara Escarpment Parks System may take place in accordance with the wishes of the landowner through a variety of methods which may include the following:

1. *Purchase by lump sum cash payment (fee simple) acquisition*
Direct purchase of private property from a landowner is the most common method for parkland acquisition. It gives complete control of the property to the purchasing authority subject to any restrictions on the deed.
2. *Purchase with down payment and the vendor taking back a mortgage*
This method is similar to the type of transaction commonly used in buying a house. Down payments may be small thus allowing the purchasing authority to obtain title to several parcels of land using limited funds. In addition, the vendors would be assured of a stable income (mortgage payments) during the amortization period. The disadvantage of this method is that it would commit the purchasing authority to long-term financing of land purchases, contrary to traditional policy.
3. *The assumption of existing mortgage(s)*
By this method the purchasing authority would acquire land by assuming any existing mortgage(s) already registered against the property. The main advantage is that it would reduce the cash outlay on the part of the purchasing authority when acquisition funds are scarce. This method is also familiar to the general public.
4. *Purchase and Resale*
Land may be purchased, then resold with restrictions attached, to ensure that the Parks System's objectives shall be achieved. By reselling, the purchasing authority would be able to recover some of the purchase price.
5. *Life Estate*
By this method, the purchasing authority would buy land and permit the owner to retain the right to live on the property for the rest of the person's life and possibly the lifetime of other family members or any other person stated.
6. *Purchase of Easements*
Legislation is required to permit the acquisition of trail easements. This method would not give exclusive possession of a property, but would grant certain specified rights. For example, it could be possible to obtain a right-of-way easement allowing a trail to pass over private property. Generally, this method should be less costly than fee simple acquisition.

7. *Donations to The Ontario Heritage Foundation*
The Ontario Heritage Act authorizes The Ontario Heritage Foundation to accept donations and to hold property.
8. *Donations to a Conservation Authority*
The Conservation Authorities Act authorizes conservation authorities to accept and hold donations of property.

Sidney Smith
Branch Lending
Branch Office

The Land Compensation Board should be used when agreement cannot be reached on appraisal values.

3.7

Proposed and Existing Escarpment Parks

The following list provides a brief description of 116 proposed and existing Escarpments Parks.

They have been classified as either "Nature Reserve Parks", "Natural Environment Recreation Parks" or "Intensive Recreation Parks", with the exceptions of Hidden Lake (#51), Lake Gibson (#114), Stoney Creek Battleground (#101) and Brock's Monument (#116). The park classifications are defined in Section 3.2.3.

The majority of these parks are owned by the Ministry of Natural Resources (M.N.R.) or the local conservation authority. Those lands which have been proposed for acquisition (Section 3.4) are also listed and classified. When purchased, management and development will be able to proceed immediately, consistent with the classification.

Within each cluster of Parks defined in Section 3.2.2, a key staging and interpretative centre has been identified and is marked with an *.

* *Designated key staging and interpretative centre for the clusters*

Cyprus Lake:

Natural Environment Recreation Park

Skinner Bluff:

Natural Environment Recreation Park

Inglis Falls:

Natural Environment Recreation Park

Walters Falls:

Natural Environment Recreation Park

Kolapore Uplands:

Natural Environment Recreation Park

Devil's Glen:

Intensive Recreation Park

Mono Cliffs:

Natural Environment Recreation Park

Credit Forks North:

Natural Environment Recreation Park

Hilton Falls:

Natural Environment Recreation Park

Dundas Valley Conservation Area East:

Natural Environment Recreation Park

Short Hills East:

Natural Environment Recreation Park

*The Tobermory Islands**Nature Reserve Park*

Cove Island and other smaller islands at the tip of the Bruce Peninsula are composed of prominent cliffs and significant geological and nature sites. Only Flowerpot Island which is part of a National Park is publicly-owned. These islands are a proposed acquisition area (Section 4.9).

2

*Fathom Five**Natural Environment Recreation Park*

The land base for Fathom Five Provincial Park consists of a steep escarpment and cave formations. The area is currently used for nature interpretation, diving, swimming and hiking. The adjoining Dunks Point is a proposed acquisition area.

3

*Little Cove**(Dunks Bay Shorelands, Driftwood Cove)**Natural Environment Recreation Park*

Steep Escarpment cliffs, geologic karst features and nature sites make up this 16 hectare (39 acre) parcel of M.N.R. land. The Dunks Bay Shorelands and Driftwood Cove areas are part of a proposed acquisition area adjacent to Little Cove.

*4

*Cyprus Lake**Natural Environment Recreation Park*

Cyprus Lake Provincial Park, south of Tobermory, is used for camping, hiking, swimming, picnicking, canoeing and snowmobiling and contains nature, geological and archaeological sites.

5

*Cabot Head North and Central**Nature Reserve Park*

There are many nature, geologic and historic sites within this tract which is partially owned by M.N.R. Cabot Head is used for fishing, hunting, canoeing, hiking and nature appreciation. The remainder is a proposed acquisition area.

6

*Cabot Head South**Natural Environment Recreation Park*

The southern Cabot Head area includes nature areas, wildlife habitats and Wingfield Basin, a natural harbour. Fishing, hunting, canoeing, hiking and nature appreciation are some of the existing uses. Portions are owned by M.N.R. and the remainder is a proposed acquisition area.

7

*Dyer Bay North**Nature Reserve Park*

This undeveloped, partially-forested 40 hectare (100 acre) property near Dyer Bay is owned by M.N.R.

8

*Dyer Bay Central**Nature Reserve Park*

This 40 hectare (100 acre) M.N.R. property contains a mixture of forest and swamp land.

9

*Dyer Bay South**Nature Reserve Park*

This group of M.N.R.-owned parcels of land includes shingle beach shoreline and relatively undisturbed forest lands used for hiking.

10

*Smoky Head**Nature Reserve Park*

Smoky Head, owned by M.N.R., contains over 200 hectares (500 acres) of forested land and geologic and nature sites. Hiking and nature appreciation occur here.

11

*Lion's Head**Nature Reserve Park*

This 500 hectare (1,230 acre) site is owned by M.N.R. and is used for hiking. The Lion's Head Peninsula contains a geologic site. A small, proposed acquisition area is located adjacent to this property.

12

*Cape Dundas**Nature Reserve Park*

This area of Escarpment cliffs and upland forest is a proposed acquisition area.

13

*Hope Bay**Nature Reserve Park*

Nature and geologic sites are contained in this 525 hectare (1,300 acre) M.N.R. property. A sea cave and potholes are among its significant geologic features. The area is used for hiking, nature interpretation and viewing.

14

*Colpoy Bluffs**Nature Reserve Park*

M.N.R. owns four parcels of forested land totalling 210 hectares (520 acres) along the north shore of Colpoys Bay. These lands are used for hiking and contain several scenic viewpoints.

15

*Spirit Rock**Natural Environment Recreation Park*

This is a heavily-wooded area on the Escarpment owned by the Sauble Valley Conservation Authority overlooking Colpoys Bay. This 90 hectare (220 acre) property is used for hiking and cross-country skiing.

*Bruce's Caves**Natural Environment Recreation Park*

Prominent cliffs and wave-cut caves are the main geologic features within this natural area. The Sauble Valley Conservation Authority owns this 17 hectare (41 acre) property which is used for hiking, cross-country skiing and picnicking.

17

*Colpoy Range (or Colpoy Lookout)**Natural Environment Recreation Park*

The Sauble Valley Conservation Authority owns this small 9 hectare (23 acre) shoreline park overlooking Colpoys Bay. This property is used for picnicking, swimming, boating and fishing. Adjacent land is a proposed acquisition area.

*18

*Skinner Bluff**Natural Environment Recreation Park*

The Sauble Valley Conservation Authority owns two tracts within this Escarpment nature site. These properties are used for hunting, hiking and cross-country skiing. The land abutting these parcels is a proposed acquisition area.

19

*Slough of Despond**Nature Reserve Park*

The Sauble Valley Conservation Authority owns this 180 hectare (450 acre) property which contains geologic and nature sites. The area is used for hiking, nature interpretation and cross-country skiing. The Slough of Despond, described by biologists as a glacial lagoon, reflects an environment that existed at the site thousands of years ago. A proposed acquisition area is adjacent to it.

20

*Kemble Mount**Nature Reserve Park*

Kemble Mount is a nature area of 134 hectares (335 acres) owned by Sauble Valley Conservation Authority which contains viewpoints and trails. The adjoining lands are part of a proposed acquisition area.

21

*Gowan Lake**Nature Reserve Park*

A nature site and wildlife habitats are characteristics of this undeveloped 80 hectare (200 acre) Sauble Valley Conservation Authority property. The property is adjacent to a proposed acquisition area.

22

*Lindenwood**Natural Environment Recreation Park*

The Sauble Valley Conservation Authority owns this 240 hectare (600 acre) wooded area along the Escarpment. It is used for hiking, cross-country skiing and nature interpretation.

23

*Indian Creek**Nature Reserve Park*

Indian Creek flows through this 22 hectare (55 acre) property owned by the Sauble Valley Conservation Authority. The parcel is a mixture of swamp, forest and cleared land.

24

*The Glen**Natural Environment Recreation Park*

These Escarpment lands include the Mud Creek headwaters as well as wetlands above the Escarpment, and a geologic site. This 700 hectare (1,740 acre) property is used for hiking, cross-country skiing, snowmobiling and wildlife management.

25

*Keppel Forest**Natural Environment Recreation Park*

This 160 hectare (400 acre) property is owned by the Sauble Valley Conservation Authority and is devoted to wildlife management.

26

*Indian Falls**Natural Environment Recreation Park*

Indian Falls consists of 12 hectares (31 acres) of land including Indian Creek and Indian Falls. This 12 metre (40 foot) waterfall was formed by the erosion of soft Queenston shale beneath hard Manitoulin dolomite. This property is owned by the Sauble Valley Conservation Authority and is used for picnicking, hiking and nature interpretation.

27

*Brookholm**Natural Environment Recreation Park*

This 10 hectare (25 acre) parcel is owned by the North Grey Region Conservation Authority. It includes the Escarpment face and a scenic lookout. It is used for hiking and cross-country skiing.

28

*Jones Falls, Pottawatomi**Natural Environment Recreation Park*

The North Grey Region Conservation Authority owns this 120 hectare (300 acre) property which includes the Escarpment face, Pottawatomi River and Jones Falls. It is used for picnicking, fishing, hiking and cross-country skiing.

West Rocks
Natural Environment Recreation Park

The North Grey Region Conservation Authority owns this heavily-wooded Escarpment area within the City of Owen Sound. This property features viewpoints and trails with hiking and cross-country skiing being the main uses.

Inglis Falls
Natural Environment Recreation Park

The Sydenham River flows over the Escarpment creating Inglis Falls. Several geologic sites exist in this 215 hectare (530 acre) property owned by the North Grey Region Conservation Authority. Swimming, fishing, boating, picnicking, hiking and cross-country skiing are the main uses.

East Rocks
Natural Environment Recreation Park

East Rocks is a small 1.2 hectare (3 acre) picnic area. The North Grey Region Conservation Authority owns the property which includes a lookout tower built as a Centennial project and sponsored by Owen Sound high schools.

Sydenham Forest West
Natural Environment Recreation Park

The property is 31 hectares (78 acres) in size and is owned by the North Grey Region Conservation Authority.

Sydenham Forest East
Nature Reserve Park

Sydenham Forest East is 40 hectares (100 acres) of forested North Grey Region Conservation Authority land.

Bayview Escarpment Forest
Nature Reserve Park

M.N.R. owns these properties in Sydenham and St. Vincent Townships. The Escarpment and a nature area lie within these 450 hectares (1,120 acres) of forests. Several viewpoints exist on these lands which are used for hunting and hiking.

Bognor Marsh
Natural Environment Recreation Park

Bognor Marsh is a source area for the Bighead River. Fishing, hunting, hiking, cross-country skiing and wildlife management are the main activities in the 525 hectare (1,300 acre) park owned by the North Grey Region Conservation Authority.

Spey River Forest East
Nature Reserve Park

A significant nature area is the main feature of this 110 hectare (275 acre) property. This forested property owned by the North Grey Region Conservation Authority is a significant headwater area for the Big-head River.

Walters Falls
Natural Environment Recreation Park

Walters Creek flows over the Escarpment at Walters Falls. Fishing, hiking and cross-country skiing occur in this 69 hectare (170 acre) property owned by the North Grey Region Conservation Authority.

Rocklyn Creek
Natural Environment Recreation Park

The North Grey Region Conservation Authority owns this 200 hectare (500 acre) area that includes Rocklyn Creek and the Escarpment. A geologic site and waterfall occur on the property which is used for hiking.

Griersville (Formerly Blantyre)
Natural Environment Recreation Park

This area which is used for hiking is 170 hectares (420 acres) and is owned by the North Grey Region Conservation Authority.

Alderdice Property
Natural Environment Recreation Park

M.N.R. owns this 22 hectare (55 acre) property which is used for hiking.

Epping Lookout
Natural Environment Recreation Park

This is a small roadside picnic area, owned by the North Grey Region Conservation Authority, 5 hectares (12 acres) in size which contains a viewpoint overlooking the Beaver Valley.

Robson Lakes Natural Area
Nature Reserve Park

There are 40 hectares (100 acres) of the Robson Lakes Conservation Area's 125 hectares (310 acres) within the area of the Proposed Plan. It is owned by the North Grey Region Conservation Authority and contains a nature area.

*Beaverdale Forest Area**Natural Environment Recreation Park*

This 60 hectare (150 acre) property on the west side of the Beaver Valley is owned by the North Grey Region Conservation Authority.

44

*Wodehouse Creek Conservation Area**Natural Environment Recreation Park*

This 101 hectare (250 acre) North Grey Region Conservation Authority property is used for hiking and nature interpretation.

45

*Beaver Valley Lowlands**Nature Reserve Park*

M.N.R. owns a total of 540 hectares (1,330 acres) of land divided into several parcels along the Beaver River. It is a canoe route, fishing, hunting and wild-life management area.

46

*Kimberley Rocks (Old Baldy)**Nature Reserve Park*

North Grey Region Conservation Authority owns 40 hectares (100 acres) of Old Baldy at the present time. A proposed acquisition area surrounds this park which is a scenic lookout used for picnicking and hiking. It is a nature site containing upland forest and several types of ferns.

47

*Wodehouse Sinkhole and**Wodehouse Creek Karst Natural Areas**Nature Reserve Park*

M.N.R. owns 300 hectares (730 acres) and the North Grey Region Conservation Authority owns 30 hectares (75 acres) in this area which includes several karst sinkholes and a disappearing creek.

48

*Upper Beaver Valley (Hogg's Falls)**Nature Reserve Park*

M.N.R. owns 80 hectares (200 acres) along the upper Beaver River. The adjacent land is part of a proposed acquisition area. This has nature areas and geologic sites including Hogg's Falls.

49

*Eugenia Falls**Natural Environment Recreation Park*

Eugenia Falls, a nature site, consists of 23 hectares (57 acres) owned by the North Grey Region Conservation Authority. Uses include cross-country skiing, hiking, picnicking and viewing the spectacular 30 metre (100 foot) Eugenia Falls.

*Kolapore Uplands (Includes Artemesia Forest Area, Osprey Forest, Gibraltar Forest Area)**Natural Environment Recreation Park*

These extensive holdings are owned by M.N.R. and the North Grey Region Conservation Authority. The Ministry owns 1,980 hectares (4,890 acres) while the North Grey Region Conservation Authority owns the remaining 930 hectares (2,300 acres) which includes a natural site and a geologic feature. This area is used for snowmobiling, cross-country skiing, hiking, hunting and fishing.

51

Hidden Lake

Blue Mountain section of the Escarpment. The area contains a geologic site, hiking trail and scenic viewpoints.

52

*Craigleith**Intensive Recreation Park*

Craigleith Provincial Park is owned by M.N.R. It consists of two separate properties, one above and one below the Escarpment, totalling 73 hectares (180 acres). The park is used for camping and water-based recreation.

53

*Petun**Natural Environment Recreation Park*

Nottawasaga Valley Conservation Authority owns this 40 hectare (100 acre) parcel of land which includes a significant geologic site. The property, used mainly for hiking and cross-country skiing, includes a scenic lookout.

54

*Pretty River North**Natural Environment Recreation Park*

M.N.R. owns some 300 hectares (750 acres) here which are adjacent to a proposed acquisition area.

55

*Pretty River South East Slopes**Nature Reserve Park*

This M.N.R. property contains some 500 hectares (1,250 acres) and is adjacent to a proposed acquisition area. There are several nature and geologic areas on the property including the Escarpment, Gibraltar moraine, the Pretty River and its headwaters.

56

*Rob Roy Forest and Lookout**Natural Environment Recreation Park*

Ownership of this area is divided between the North Grey Region Conservation Authority – 48 hectares (120 acres) and M.N.R. – 34 hectares (85 acres).

*Nottawasaga Lookout**Nature Reserve Park*

A nature area and scenic lookout are located in this 220 hectare (540 acre) M.N.R. property.

*58

*Devil's Glen**Intensive Recreation Park*

Devil's Glen Provincial Park features the Escarpment and the Mad River. This 52 hectare (130 acre) M.N.R. property contains a nature site, vertical cliffs, a series of waterfalls, and is used for camping and recreational day-use.

59

*Nottawasaga Bluffs**Nature Reserve Park*

This 37 hectare (92 acre) property owned by the Nottawasaga Valley Conservation Authority contains both nature and geologic sites. Camping, hiking and cross-country skiing are the main activities.

60

*Lavender Falls**Nature Reserve Park*

The area currently owned by M.N.R. is 200 hectares (500 acres). Adjacent land is a proposed acquisition area. The property includes a waterfall on the Noisy River and a nature area.

61

*Pine River Fishing Area**Natural Environment Recreation Park*

M.N.R. owns 77 hectares (190 acres) in the Pine River Valley which are used for fishing and picnicking.

62

*Boyne Valley West**Intensive Recreation Park*

This 230 hectare (570 acre) property is part of the proposed Boyne Valley Provincial Park.

63

*Boyne Valley East**Nature Reserve Park*

The Eastern portion of the Boyne Valley area includes the Boyne River and associated valley with buried portions of the Escarpment. Two major geologic sites are contained in this 750 hectare (1,850 acre) part of the future Boyne Valley Provincial Park. The Manitoulin Formation is visible along the Boyne River and Orangeville and Singhampton Moraines traverse the area separated by the Violet Hill Spillway, a major meltwater channel.

*Mono Cliffs**Natural Environment Recreation Park*

Mono Cliffs land ownership is shared by M.N.R. which owns 620 hectares (1,530 acres), and the Nottawasaga Valley Conservation Authority, which owns 97 hectares (240 acres). The Mono Rocks Outliers are a geologic feature with the vertical dolomite cliffs and their related swamp forests and wetland vegetation making this property a nature area also.

65

*Scott's Falls (Cannings Falls)**Nature Reserve Park*

These M.N.R. properties contain 490 hectares (1,200 acres). The adjacent lands are a proposed acquisition area. The area is currently used for hiking and is a nature area which includes three waterfalls.

66

*Kolodziet Property**Natural Environment Recreation Park*

Metropolitan Toronto and Region Conservation Authority owns 35 hectares (86 acres) along the Humber River. It is used for picnicking, cross-country skiing and hiking.

67

*Humber Forest**Nature Reserve Park*

This 220 hectare (550 acre) forest area in the upper reaches of the Humber River watershed is owned by the Metropolitan Toronto and Region Conservation Authority. The Sleswick swamps – an area of mixed swamp forest and low-lying deciduous trees – make up a nature area.

68

*Glen Haffy**Natural Environment Recreation Park*

Metropolitan Toronto and Region Conservation Authority own this multi-use, 390 hectare (970 acre) property. Located along the Humber River, this area is used for fishing, hiking, picnicking, group camping and cross-country skiing.

69

*Alton Conservation Area**Nature Reserve Park*

This M.N.R. property is 140 hectares (350 acres) and is used for fishing, hiking, snowmobiling and cross-country skiing.

70

*Upper Credit Valley**Nature Reserve Park*

This 46 hectare (115 acre) property is owned by the Credit Valley Conservation Authority and includes the Credit River and associated swamp lands.

Credit Forks North
Natural Environment Recreation Park

M.N.R. owns some 180 hectares (450 acres) south of Cataract which about a proposed acquisition area. Exposures of rock at Cataract Falls are an important geologic site. The Credit River crosses the property which is used for hiking, picnicking and fishing.

72

Credit Forks South
Nature Reserve Park

The southern portion of Credit Forks property is part of a nature area which includes the Forks of the Credit. This M.N.R. property is approximately 23 hectares (57 acres) and is used for picnicking and hiking. It is adjacent to a proposed acquisition area.

73

Belfountain Conservation Area
Intensive Recreation Park

The Credit Valley Conservation Authority operates a 10 hectare (25 acre) intensively-used recreation area within the Village of Belfountain.

74

Credit Forks/South Peel
Nature Reserve Park

This proposed acquisition area includes a nature area and the geologically-important Devil's Pulpit formation.

75

Terra Cotta North-East
Nature Reserve Park

This is an undisturbed nature area owned by the Credit Valley Conservation Authority consisting of two properties totalling 55 hectares (140 acres).

76

Terra Cotta South
Intensive Recreation Park

The Credit Valley Conservation Authority owns this 125 hectare (310 acre) property, used for hiking, cross-country skiing, fishing, picnicking and swimming.

77

Silver Creek
Nature Reserve Park

The Escarpment and Silver Creek gorge highlight this nature area owned by the Credit Valley Conservation Authority. The property is 520 hectares (1,280 acres).

Limehouse
Nature Reserve Park

The Credit Valley Conservation Authority owns this property of 77 hectares (190 acres) which includes limekilns, an abandoned railroad, ruins of an old mill, a hiking trail and the Black Creek.

79

Speyside Tract
Nature Reserve Park

M.N.R. owns this 20 hectare (50 acre) site in Halton Hills.

80

Tirion Tract
Nature Reserve Park

This 20 hectare (49 acre) block of forested land is owned by the Halton Region Conservation Authority.

81

Scotch Block
Natural Environment Recreation Park

The Halton Region Conservation Authority operates this 45 hectare (110 acre) flood-control reservoir.

82

Esquising and Escarpment Tract
Nature Reserve Park

The Halton Region Conservation Authority owns this 42 hectare (105 acre) forested nature area which is used for hiking.

*83

Hilton Falls
Natural Environment Recreation Park

This 525 hectare (1,300 acre) nature area includes the Sixteen Mile Creek and associated Hilton Falls. It is a well-used property devoted to picnicking, hiking and cross-country skiing. It is owned by the Halton Region Conservation Authority.

84

Kelso
Intensive Recreation Park

This is a recreation area with facilities for picnicking, camping, swimming, boating, downhill skiing and historical interpretation. The Halton Region Conservation Authority owns this 235 hectare (580 acre) property.

85

Crawford Lake North-West
Natural Environment Recreation Park

An important feature of this area is Crawford Lake, a meromictic lake which has only partial water turnover. Halton Region Conservation Authority owns this property which is used for hiking, cross-country skiing and picnicking. This nature area includes a proposed acquisition area.

*Crawford Lake South-East**Nature Reserve Park*

This is a nature and geologic area which includes Escarpment and talus slopes with three types of forest. It is approximately 160 hectares (400 acres) and is owned by the Halton Region Conservation Authority. Adjacent land is part of a proposed acquisition area.

87

*Rattlesnake Point**Natural Environment Recreation Park*

The Halton Region Conservation Authority owns this scenic property which is used for hiking, picnicking and camping. It is some 93 hectares (230 acres) and contains geologic and nature sites. Adjacent land is a proposed acquisition area.

88

*Mount Nemo**Nature Reserve Park*

This includes a nature and geologic area. The Halton Region Conservation Authority owns 98 hectares (245 acres) which are used for hiking. The balance is a proposed acquisition area.

89

*Crawford Forestry Tract**Natural Environment Recreation Park*

This 73 hectare (180 acre) site is owned by the Halton Region Conservation Authority and is a geologic area which has an ancient dried-up waterfall. The area is used for hiking.

90

*Twiss Tract**Natural Environment Recreation Park*

This 20 hectare (50 acre) forested property is owned by the Halton Region Conservation Authority and is used for hiking.

91

*Lake Medad**Nature Reserve Park*

The Halton Region Conservation Authority owns 28 hectares (68 acres) in Flamborough Township which includes a peat bog.

92

*Spencer Gorge Wilderness Area**Natural Environment Recreation Park*

This 53 hectare (130 acre) nature area owned by the Hamilton Region Conservation Authority is used for hiking, viewing and picnicking.

*Crook's Hollow**Natural Environment Recreation Park*

This 20 hectare (50 acre) park owned by the Hamilton Region Conservation Authority includes facilities for picnicking, fishing, hiking and historical interpretation.

94

*Christie Conservation Area**Intensive Recreation Park*

This multi-purpose conservation project contains 345 hectares (850 acres) and is used for swimming, boating, picnicking and fishing. The Hamilton Region Conservation Authority owns this property.

95

*Summit Bog Muskeg Preserve**Nature Reserve Park*

A 12 hectare (31 acre) kettle bog with representative vegetation patterns is owned by the Hamilton Region Conservation Authority.

96

*Dundas Valley Conservation Area West**Nature Reserve Park*

The western portion of the Dundas Valley contains important nature and geologic areas. The Hamilton Region Conservation Authority owns some 160 hectares (400 acres) used for hiking and cross-country skiing.

*97

*Dundas Valley Conservation Area East**Natural Environment Recreation Park*

The Hamilton Region Conservation Authority operates a 400 hectare (1,000 acre) multi-use park which includes picnicking, a trail centre, hiking, bicycling and cross-country ski trails.

98

*Tiffany Falls**Natural Environment Recreation Park*

This 5 hectare (13 acre) area is owned by the Hamilton Region Conservation Authority and is used for hiking and nature interpretation.

99

*Mount Albion**Natural Environment Recreation Park*

This 50 hectare (120 acre) property owned by the Hamilton Region Conservation Authority is used for hiking, cross-country skiing and as a scenic lookout.

100

*Felker's Falls**Natural Environment Recreation Park*

The Hamilton Region Conservation Authority owns this 15 hectare (38 acre) park which is used for picnicking, hiking, and has a scenic lookout, a waterfall and a gorge.

Stoney Creek Battlefield

This 12 hectare (29 acre) park owned by the Niagara Parks Commission is used for day-use recreation activities. A monument and historical buildings commemorate its past.

102

*Devil's Punch Bowl**Natural Environment Recreation Park*

The Hamilton Region Conservation Authority owns this scenic picnic area of 25 hectares (63 acres). It is a geologic site with a waterfall and gorge.

103

*Vinemount Conservation Area**Natural Environment Recreation Park*

The Hamilton Region Conservation Authority owns this 16 hectare (40 acre) property used for hiking and picnicking.

104

*Winona Conservation Area**Natural Environment Recreation Park*

The Hamilton Region Conservation Authority owns this 4 hectare (10 acre) Escarpment property. This site contains a nature area.

105

*Beamer Memorial Conservation Area**Natural Environment Recreation Park*

The Niagara Peninsula Conservation Authority owns this 50 hectare (125 acre) property which is used for picnicking and hiking. There are nature and geologic areas on the property.

106

*Mountainview Conservation Area**Natural Environment Recreation Park*

This 25 hectare (62 acre) parcel is owned by the Niagara Peninsula Conservation Authority and is used for hunting and hiking.

107

*Cave Springs**Natural Environment Recreation Park*

This is a proposed acquisition area and includes a forested escarpment plain, crevasse valleys, cliff face, several lookouts, archaeological, and nature sites.

108

*Ball's Falls**Natural Environment Recreation Park*

The Niagara Peninsula Conservation Authority owns this 90 hectare (220 acre) property which is used for camping and day-use activities. This nature and geologic area includes historic buildings, ruins and two waterfalls.

*Louth Conservation Area**Nature Reserve Park*

This is a 32 hectare (78 acre) nature area owned by the Niagara Peninsula Conservation Authority and is used for hiking.

110

*Rockway Conservation Area**Nature Reserve Park*

Picnicking and hiking are the main uses of the 85 hectare (210 acre) site owned by the Niagara Peninsula Conservation Authority. It is a geologic and nature site.

111

*St. Johns Conservation Area**Nature Reserve Park*

This 32 hectare (78 acre) tract of land is owned by the Niagara Peninsula Conservation Authority. Hiking and nature interpretation are popular.

112

*Short Hills West and Central**Nature Reserve Park*

The area includes characteristic short hills in a re-entrant valley of the Escarpment, a scenic waterfall and a land bridge. Approximately 565 hectares (1,400 acres) are owned by M.N.R. The area contains nature and geologic sites and a hiking trail.

* 113

*Short Hills East**Natural Environment Recreation Park*

M.N.R. owns some 48 hectares (120 acres) which are used for hiking.

114

Lake Gibson

Ontario Hydro owns this lake and its shoreline south of St. Catharines which is 400 hectares (1,000 acres) in size.

115

*Woodend Conservation Area**Natural Environment Recreation Park*

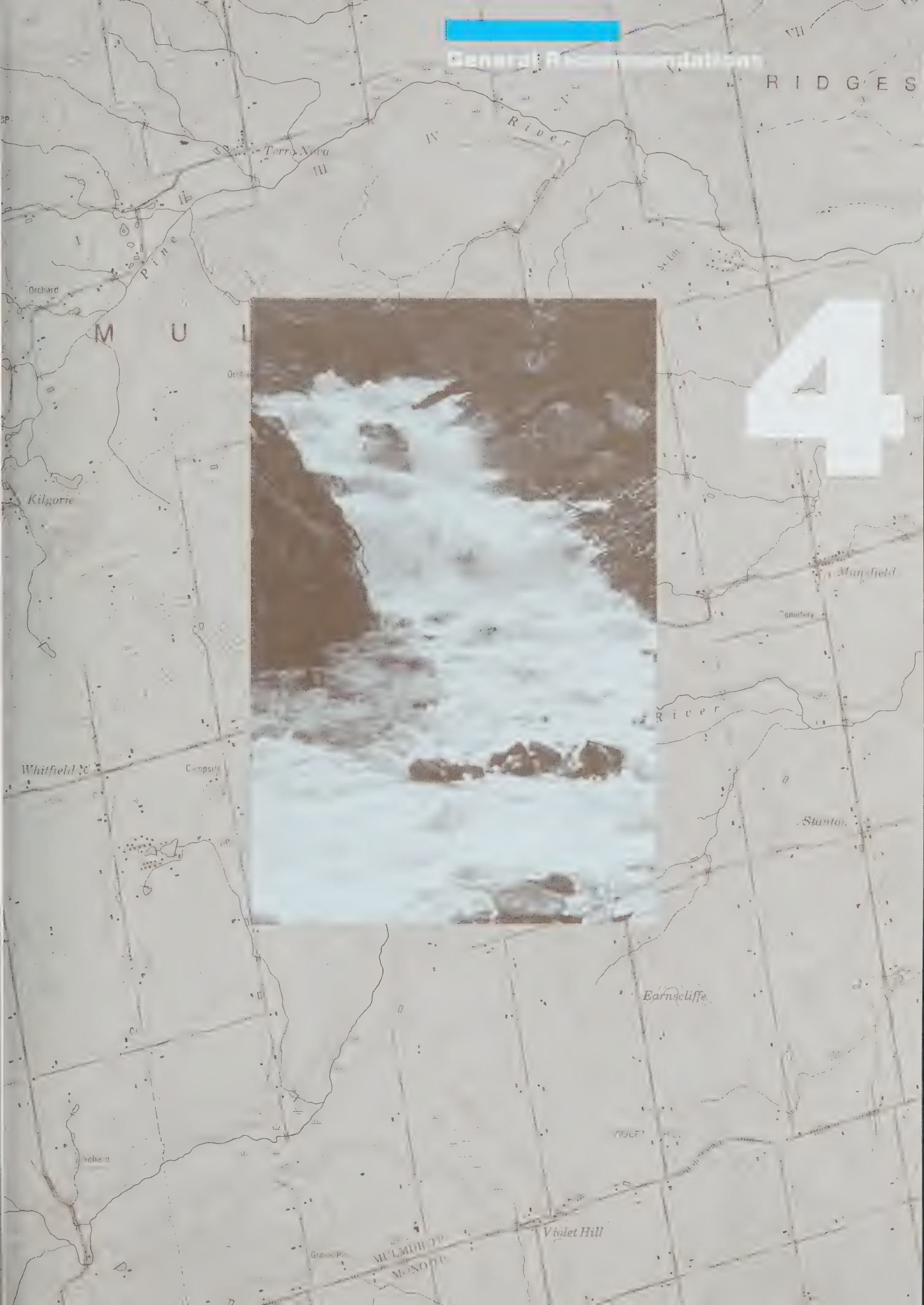
This 37 hectare (92 acre) property is owned by the Niagara Peninsula Conservation Authority. Hiking is the main use in this area.

116

Niagara Parks (Brock's Monument)

This historical park situated at the southern end of the Niagara Escarpment is owned and operated by the Niagara Parks Commission. A monument and several plaques are located there commemorating General Isaac Brock and the War of 1812. It is used for picnicking, hiking and day-use recreation.

4



4.1

Administration and Implementation of The Plan

Given the number of jurisdictions affected by the Niagara Escarpment Plan, the successful implementation of its policies will require the cooperation of many – Provincial ministries, conservation authorities, municipal councils, private individuals and organizations.

4.1.1

Functions to be Performed

The following functions will need to be carried out:

1. The periodic review of the Niagara Escarpment Plan and the preparation and processing of amendments as required by Section 17 of The Niagara Escarpment Planning and Development Act.
2. The preparation and processing of amendments to the Niagara Escarpment Plan requested by any person, ministry or municipality or initiated by the Minister or the Commission in accordance with Section 12 of The Niagara Escarpment Planning and Development Act.
3. The review of structural improvements and undertakings proposed by municipalities, local boards and ministries to determine their conformity with the Niagara Escarpment Plan.
4. The review and analysis of existing and proposed municipal official plans and by-laws to determine their conformity with the Niagara Escarpment Plan.
5. The administration of a land use control system and/or the monitoring of municipal planning administration (land use control, consent and subdivision approval) to ensure conformity with the Niagara Escarpment Plan.
6. The coordination of the programs of Provincial ministries and agencies to ensure conformity with the Niagara Escarpment Plan. For example:
 - Acquisition of land (Ministry of Natural Resources, Ministry of Government Services and conservation authorities).
 - Disposal of land (Ministry of Natural Resources and Ministry of Transportation and Communications).
 - Funding of municipal planning (Ministry of Housing).
7. The periodic review of The Niagara Escarpment Planning and Development Act or its successor and the processing of amendments.
8. The continual monitoring and evaluation of the environment of the area covered by the Niagara Escarpment Plan to determine how the goals and objectives of The Niagara Escarpment Planning and Development Act are being met and to initiate appropriate remedial actions if necessary.

4.1.2

Provincial and Municipal Roles

The preparation of the Niagara Escarpment Plan was assigned to a Provincial agency, the Niagara Escarpment Commission, this being seen as the most practical way of achieving a coordinated plan for the whole area of Provincial interest.

It is quite conceivable that much, if not all, of the implementation of the detailed land use policies can be delegated to municipalities, and much of the implementation of the Niagara Escarpment Parks System should remain with conservation authorities, coordinated by the Ministry of Natural Resources. However, this would not signify the end of the Provincial interest in the Escarpment area.

In examining the list of functions to be performed after the Niagara Escarpment Plan is approved, it is evident that a Provincial Minister must retain a continuing responsibility for the Niagara Escarpment Plan.

There is a need for coordination of programs and policies of Provincial ministries and agencies, the preparation of amendments to the Plan, the periodic review of the Plan, the determination of whether or not local official plans and by-laws conform to the Plan and the monitoring of the way in which municipalities interpret the Plan in their administration of it.

4.1.3

Land Use Control: Development Control and/or Zoning By-laws

In the Government Policy statement of June 1973, "Development Planning in Ontario – The Niagara Escarpment", it was stated that "*the present system of controlling land uses through zoning by-laws cannot provide the kind of control needed in a large, varied and environmentally-sensitive area such as the Niagara Escarpment*". Accordingly, provisions were made in The Niagara Escarpment Planning and Development Act for the designation of areas of development control and for regulations and procedures for the practice of this development control.

It could be interpreted from this policy statement that it was the intention at the time that the Niagara Escarpment Plan should be implemented by the method of development control as set out in The Niagara Escarpment Planning and Development Act.

The Commission has had a great deal of experience in exercising development control, although only as an interim procedure, and without an approved Plan to back it up.

A major advantage which a standard zoning by-law has over development control is that it lists the uses permitted in each zone and the standards which apply (e.g. minimum lot size, front yard, rear

yard, side yard, maximum building height, etc.). A property owner generally knows in advance what he can do on any piece of land. On the other hand, a by-law of this sort is prepared from a general knowledge only of conditions in the zone. Thus a zoning by-law cannot set out the requirements that should be applied if every property were treated according to its own environmental conditions.

Unlike zoning, the development control process provides an opportunity to deal with each application according to the environmental features of the property. Development control is, therefore, a very suitable procedure for an environmentally-sensitive and varied area. When used to implement a plan, it is a positive control, not a negative one. It permits the development to be fitted into the natural and visual environment, on a site-by-site basis, in the best possible way.

4.1.4

Development Control and the Niagara Escarpment Plan

The approval of the Niagara Escarpment Plan, with specific designations and land use policies, will satisfy a concern about the interim development control procedure practised while the plan was being prepared. The concern expressed was that unlike zoning, development control created too much uncertainty about the permitted uses on a property. The interim development control has been used to make decisions in answer to two questions:

1. Is the principle of having a particular type of development acceptable at this stage of preparation of the Plan?
2. If the answer is "yes", what measures can be taken to ensure that the development is compatible with its site and setting?

The Plan's policies and designations will provide the answers to the first question, thus substantially reducing uncertainty about permitted development. It is in supplying an answer to the second question that development control will be able to perform its true function – detailed site planning.

A disadvantage of development control compared to zoning is that it will take longer to obtain development approval, and there is a staff manpower cost in assessing applications. Considering the benefits of the procedure, however, the time taken is not great and the cost is minimal. In fact, if a change in zoning is required to permit a development, that develop-

ment can be dealt with more rapidly and economically through the development control process.

On the basis of its experience with interim development control, the Commission considers that development control is the preferred method of implementing the land use plan. However, municipalities should have the option of using either zoning or development control in Urban and Minor Urban Centres and in the Escarpment Recreation Areas.

4.1.5

Implementing Body for Land Use Controls

During the preparation of the Proposed Plan, it was only logical that the agency preparing it should have had a responsibility for regulating development in the area during that period, proposing what development should be permitted to proceed, and what decisions on development should be deferred until the Niagara Escarpment Plan is completed.

Once the Plan is approved, this situation will no longer apply. The Plan will provide the detailed policies which were not available for the interim development control procedure carried out by the Commission from June 1975 on. The principal reason for interim development control being performed by the "plan developer" will cease to exist.

Section 24 of the Act authorizes the Minister to delegate authority to issue development permits to a county or regional municipality, or to a city outside the regional municipality having jurisdiction in the Niagara Escarpment Planning Area, or any part thereof or to the Niagara Escarpment Commission.

The Act requires that delegation of authority to issue development permits to a region, county or city will be subject to an application being made and a statement of the organizational structure and the administrative procedures to be established.

4.1.6

Development Control – Delegation to Cities in Regional Municipalities

The Niagara Escarpment Planning and Development Act does not make provision for delegation of development control to a city within a regional municipality. It limits this delegation to the regional municipality. Yet, within cities through which the Escarpment passes, such as Hamilton, there may be value in using development control to regulate development in the immediate vicinity of the Escarpment. Therefore, the Act should be amended to include cities within regional municipalities in this delegation of authority.

4.1.7

Development Control – Notification of Decisions

The Act now requires that only the applicant and assessed owners of land within 400 feet (122 metres) of the subject property are notified of a development permit decision. Those who have been notified are the only persons entitled to appeal the decision. As a matter of practice, the Commission has included the local municipality in the notification list and there has been at least one occasion where a local municipality has appealed.

The right of the local municipality to receive notice, and to appeal, has been questioned. As it seems unreasonable to exclude the local municipality, the Act should be amended to include the local municipality on the notification list.

There are also reasons to justify that the Act be further amended to include on the notification list the names of all persons requesting notification, thereby giving them the right to appeal.

4.1.8

Development Control – Appeals

While the interim development control practised by the Commission since 1975 has worked well, there have been criticisms of the appeal procedures prescribed by the Act.

There has been criticism of not using the Ontario Municipal Board for development permit appeals, and of using instead, hearing officers appointed under the authority of The Niagara Escarpment Planning and Development Act. The Ontario Municipal Board was not used for hearings on these appeals because of the delays in scheduling Board hearings, and because the planning decisions were, by and large, not major ones. However, the public awareness of the Ontario Municipal Board as a court of appeal on planning decisions is a strong argument in favour of its use in the development control process. This is no reflection on the competence of the present development control hearing officers who have done an excellent job.

It should not be difficult to resolve this matter. A special section to deal with Niagara Escarpment development permit appeals could be formed within the Ontario Municipal Board, using the present manpower and financial allotment of the Ministry of Housing hearing officers. This section would deal only with development permit appeals and would operate in accordance with the provisions of The Niagara Escarpment Planning and Development Act, as amended.

There has also been criticism that final decisions on development permits should not be made by the Minister of Housing as required under the current legislation, but by Cabinet — or as an alternative, an appeal to Cabinet on the Minister's decision should be permitted.

In this connection, The White Paper on The Planning Act includes recommendations limiting appeals to Cabinet on Ontario Municipal Board decisions. If these recommendations are accepted, it would seem appropriate to apply the resulting procedures to development permit appeals.

Finally, there is no provision in the current legislation for screening out frivolous appeals against development permit decisions. This subject is dealt with in The White Paper on The Planning Act, in connection with appeals to the Ontario Municipal Board. The procedures recommended, if adopted, would be appropriate for development permit appeals.

4.1.9

Recommendations on Implementation

The Commission recommends that:

- a) Development control be the preferred method of implementing the land use plan. However, municipalities should have the option of using either zoning or development control in the Urban Centres, Minor Urban Centres, and Escarpment Recreation Areas.
- b) Consideration be given to the provisions of Section 24 of the Act in determining the delegation of authority to issue development permits.
- c) The Niagara Escarpment Planning and Development Act be amended so that cities in regional municipalities may be delegated the authority to issue development permits.
- d) The Niagara Escarpment Planning and Development Act be amended to provide for appeals on development permits to be dealt with by the Ontario Municipal Board. The Ontario Municipal Board should be restructured to provide a special section to deal with appeals on development permits.
- e) The Niagara Escarpment Planning and Development Act be amended to provide notification of decisions on development permits to affected municipalities.
- f) The Niagara Escarpment Planning and Development Act be amended so that notification of decisions on development permits be provided to those who request so in writing and they be allowed to appeal.
- g) The Niagara Escarpment Planning and Development Act be amended so that the procedure on appeals to Cabinet as a result of The White Paper on The Planning Act will be applied to development permits.
- h) The Niagara Escarpment Planning and Development Act be amended so that frivolous appeals will be dealt with according to the procedure resulting from The White Paper on The Planning Act.

4.2

The Bruce Trail

The Gertler Report recommended that there should be a system which linked parks, important natural features and the Escarpment in a harmonious manner. The Bruce Trail, which had been developed by volunteer effort, was seen as a major component of this system.

The Inter-Ministerial Task Force, following the theme of the Gertler recommendation, was concerned about the frequent re-routings of the Bruce Trail and concluded that there was a need to secure a permanent route. To achieve this, the Task Force made the following recommendations:

- "The Province should determine the best route for the Bruce Trail and then secure it by means of easements and outright purchases"*.
- "The Province should allocate special funds, as required, to secure the best route for the Bruce Trail"*.

These recommendations were subsequently endorsed by the Government of Ontario. As a result, the Commission was directed to reflect this decision in its planning proposals.

How to secure the best, or as it came to be known, "the optimum" route for the Bruce Trail, became an arduous challenge for the Commission. Through field work and consultation with the Bruce Trail Association and the Ministry of Natural Resources, it was a simple enough matter to arrive at the most desirable location for the Trail from the point of view of the hiker. It was more difficult, however, to recommend a route acceptable to individual landowners and municipalities.

Then there was also the question of how to secure an "optimum" route.

To follow the practice used for constructing new roads, with wholesale expropriations, was clearly unthinkable.

Detailed negotiation with each landowner was obviously preferable so that a mutually-agreed location for the Trail could be established by some form of easement agreement or outright acquisition.

To provide a basis for this, and influenced by the requirement to deal with this issue, the Commission showed an optimum route for the Trail on the maps of its Preliminary Proposals. The Commission proposed this as an approximate route only, with the actual route to be determined after negotiations with the affected landowners.

There were many landowners who objected to the designation of a trail on their property in a plan, even though it was described as "approximate".

There were other landowners who were content to have the Trail on their property with just a "handshake" agreement, but who became concerned at the possible permanency implicit in a trail designation in a plan.

The Commission concluded that it was not practical to secure a route for the Bruce Trail by designating a detailed route on a plan and then negotiating its acquisition by easement or purchase.

A more flexible, consultative process was required which would involve the landowners, municipal councils, the Bruce Trail Association and the Government of Ontario in a cooperative effort to work out a mutually-acceptable location which could then be secured by agreements, easements or acquisition from willing landowners.

While it is recognized that stabilization of the Bruce Trail will not be easily achieved, the Commission considers that it is an essential component of the Niagara Escarpment Parks System, and that such a remarkable volunteer achievement by the Bruce Trail Association and private landowners should not be allowed to founder.

Escarpment landowners have been generous in allowing the Trail to pass through their properties but the fact remains that approximately 45 per cent of the Bruce Trail – 320 kilometres (200 miles), is now on public roads. Some of this, on back-country roads, is suitable for a hiking trail, but the majority is not. The Trail, at one time continuous, is now interrupted because some landowners have denied passage of the Trail through their properties and in some instances no satisfactory alternative route has been found.

The challenge is to achieve a gradual reconstruction of the Trail in a suitable location. Patience, understanding and cooperation, as well as financial support, will be required to achieve this reconstruction.

4.2.1

Stabilization of the Trail

Stabilization can only be accomplished if municipal councils, landowners, the Bruce Trail Association and the Government of Ontario work together to establish an acceptable route. In the southern portion of the Escarpment, the Bruce Trail is a popular and important recreational resource for area residents. In the northern portion of the Escarpment, the Bruce Trail is also a significant recreational resource for tourists.

The following measures are required:

1. *Management* – The first requirement is to bring the management of the existing Trail up to a high standard. This will require the use of trail wardens, frequent litter clean-ups, an intensive effort to educate trail-users to respect the Trail and private property, as well as special attention to landowner

relations. The Bruce Trail Association has offered to perform this task as a voluntary organization, outside of Government. It has already demonstrated the ability to raise considerable funds through private donations, and has used this to assist conservation authorities to acquire some key Escarpment lands. The Association has indicated it is prepared to increase its financial program to provide the required management. The Association should be encouraged to undertake the management task in a professional manner and the Government of Ontario should provide initial financial support to assist it.

2. **Liability** – Legislation is required to deal more effectively with the question of landowner liability when trails are voluntarily permitted on private lands. Such legislation, now under discussion, could provide more stability to the informal “handshake” agreement on which so much of the Bruce Trail route now depends. Improving the standard of management of the Trail, however, is likely to have a much greater stabilizing influence.
3. **Trail Easements** – While the informal “handshake” agreement has much to commend it, something more is required if full stability of the Trail is to be achieved. Legislation should be enacted to permit trail easements which should be negotiated with willing landowners.
4. **Funding** – The timely provision of funds for the acquisition of easements or for acquisition in fee simple of the Bruce Trail component of the Niagara Escarpment Parks System should be provided principally by the Government of Ontario. This may be supplemented by private donations and by conservation authority funds in certain instances.

4.2.2

Recommendations on the Bruce Trail

The Commission recommends that:

- a) The Bruce Trail provide the connective link for the Niagara Escarpment Parks System and it be acquired through a consultative process entered into by willing landowners, the Bruce Trail Association, municipalities and the Government of Ontario.
- b) The Bruce Trail Association provide professional management of the Trail and the Government of Ontario provide initial financial support for this management.
- c) Legislation be enacted to protect landowners from liability.
- d) Legislation be enacted to permit the negotiation of trail easements.
- e) The Government of Ontario provide funds for the acquisition of the Trail as part of the Niagara Escarpment Parks System.

4.3

Scenic Drives

The Gertler Report proposed a scenic drive along the Escarpment as a means of public access. It was even suggested that such a drive might have to be constructed in some locations.

With this in mind, and reinforced by the success of a scenic drive along the Escarpment in the Regional Municipality of Niagara, the Commission undertook to designate such a system from Queenston to the Cabot Head. This was included in the Preliminary Proposals. With the exception of two sections in Bruce County, all drives designated were on existing roads.

The proposed scenic drives drew criticism from less urbanized Escarpment municipalities. There was concern about the designation attracting heavy traffic on previously lightly-used rural roads. There was even greater concern about the possible financial burden on the municipalities for maintaining the drives under anticipated traffic.

There was little enthusiasm for the idea that drives might contribute to the tourism economy of the municipalities. Finally, there was little expressed public support for the idea of scenic drives.

While estimates of the ultimate costs of developing scenic drives varied widely, it was apparent that these costs could be substantial.

Considering the current concerns about future energy supplies, construction and maintenance costs, the Commission decided not to include scenic drives in the Proposed Plan.

For the adventuresome who are prepared to chart their own course, the routes are there now. For municipal councils which determine in future that scenic drives should be developed and signed in their municipalities, the option remains open to them to do so.

4.3.1

Recommendation on Scenic Drives

The Commission recommends that:

Scenic drives be signed by municipalities if they wish to do so.

4.4

Conservation Authorities and Recreation

The role of the conservation authorities in providing recreational opportunities along the Escarpment needs re-examination. Initially, conservation authorities were encouraged to acquire Escarpment lands through the 75 per cent funding grants from the Ministry of Natural Resources, and as a result the authorities embarked on a substantial acquisition of recreational lands. In 1978, however, this grant structure was reduced in stages to 50 per cent, and conservation authorities have been encouraged to focus on a water management role rather than a recreational role. As they already own large acreages of Escarpment parkland, with unfilled gaps on the acquisition program, the future position of the conservation authorities with respect to the Niagara Escarpment Parks System is, at this time, an uncertain one. The Commission considers, however, that the conservation authorities are equipped to play a very important role in providing recreational opportunities along the Escarpment.

Recreational opportunities on the Escarpment are required for two groups of people: the residents of the municipalities in the area and those from outside the area who are attracted to it. The conservation authorities have been contributing towards meeting the recreational needs of the municipalities they serve, and it seems fitting that they would continue to perform this role in the Niagara Escarpment Parks System. The Ministry of Natural Resources, on the other hand, should aim to meet the recreational demands on the Escarpment area of the visitors from outside it. In practice, of course, it is neither possible nor desirable to divide people and parks into separate groups, but a general guideline of this nature is seen as being useful for future park acquisition and management.

There are some park areas, now owned by the Ministry of Natural Resources, that are not yet organized as parks. Conservation authorities may be prepared to undertake the management of these areas, within the Niagara Escarpment Parks System, with the property ownership remaining that of the Ministry. Conservation authorities should be encouraged to do this. Conversely, it may be appropriate for the Ministry of Natural Resources to acquire some conservation authority lands subject to an agreement with the authority. The authority may continue to manage these lands.

Conservation authorities may also be in a position to play a significant role along with the Ministry of Natural Resources in stabilizing the Bruce Trail. The Trail provides a link between conservation authority

lands as it links the entire Niagara Escarpment Parks System. This is especially the case in the areas of the Niagara Peninsula, Hamilton Region, and Halton Region conservation authorities. The Trail in the southern portion of the Escarpment area is also heavily used by the residents of that area. The conservation authorities possess the local knowledge and political representation that would make them useful participants in the development of the necessary agreements between landowners, municipal councils, the Bruce Trail Association and the Government of Ontario.

4.4.1

Recommendations on Conservation Authorities and Recreation

The Commission recommends that:

- The role of conservation authorities in providing recreation lands be re-examined.
- Agreements be developed on the shared management of existing parklands between the conservation authorities and the Ministry of Natural Resources.
- Conservation authorities assist in negotiations for land acquisition for appropriate sections of the Bruce Trail.
- Provincial grants to conservation authorities for Escarpment land acquisition within the Niagara Escarpment Parks System should revert to a 75 per cent grant.

4.5

Significant Geological Areas

The Niagara Escarpment possesses a great number and variety of geological features and environments, many of which are unique in the Province and include some of the best exposures of rocks and fossils of the Silurian and Ordovician Periods (400-500 million years ago) to be found anywhere in the world.

The Ministry of Natural Resources has identified as significant a total of 166 geological sites in the original Niagara Escarpment Planning Area. Of these, 25 sites in the area covered by the Proposed Plan are considered to be of Provincial significance, although all of the remainder warrant measures to be taken for their preservation.

The evaluations conducted by Ministry personnel on each site included its scientific, educational and interpretative value, and the degree of disturbance of the site. Details on these areas can be found in the Ministry of Natural Resources' Report "Earth Science Candidate Nature Reserves in The Niagara Escarpment Planning Area".

Although considerable effort was put into site identification, there remains much to be done in further defining the areas and in completing the inventories of the sites themselves. Recognizing that physical features are not as sensitive to development as biological features and can withstand certain pressures, the Commission decided not to attempt preservation of specific geological areas under a separate land use designation.

Geological areas which are part of the Escarpment itself will, however, fall under the protective measures of Escarpment Natural or Escarpment Protection designations. Those that are in the other land use designations can be protected on a site-by-site basis during the implementation of the Niagara Escarpment Plan. The significant geological areas of Provincial importance shown on Map C of the Proposed Plan are:

In Bruce County:

1. Flowerpot and Bears Rump Islands
2. St. Edmunds Cave near Tobermory
3. Karst pavement, St. Edmunds Township
4. Cabot Head area
5. Lion's Head Promontory

In Grey County:

6. Slough of Despond, Keppel Township
7. Wodehouse Creek Karst, near Kimberley
8. Whitby Formation at Delphi Point
9. Moraines of Blue Mountain area
10. Crevice Caves of Blue Mountain area

In Simcoe and Dufferin Counties:

11. Pine River Valley
12. Primrose-Mono Centre area near Shelburne
13. Scott's-Cannings Falls near Orangeville

In Peel and Halton Regions:

14. Mono Mills area
15. Caledon Meltwater Deposits near Forks of the Credit
16. Badlands Topography near Cheltenham
17. Lowville Re-entrant Valley near Milton

In Hamilton-Wentworth and Niagara Regions:

18. The Escarpment in Dundas-Waterdown area
19. Dundas Valley in Copetown-Ancaster area
20. Devil's Punch Bowl
21. Ball's Falls, east of Vineland
22. Twenty Mile Creek Drowned River Mouth
23. Twelve Mile Creek Re-entrant Valley
24. St. Davids Buried Gorge
25. Niagara River Gorge

As mentioned, the information which has been acquired on significant geological areas and sites extends beyond the area of the Proposed Plan itself. This information is available to all planning bodies — municipal, regional and provincial — to be taken into account when local plans are being prepared and implemented.

4.5.1

Recommendations on Significant Geological Areas

The Commission recommends that:

- a) Voluntary agreements be sought with the owners of private lands for the protection of recognized geological areas and sites located on those lands. The agreements may take the form of informal understandings, formal conservation easements, tax concessions, or land donations arranged through the Ontario Heritage Foundation.
- b) Research should be continued by the Ministry of Natural Resources to further develop the information and refine the boundaries of these geological areas and sites. This research should develop the scientific, educational and interpretative value of each site and fit them into an overall interpretative program.
- c) In the rehabilitation of pits and quarries, the preservation of some of the exposed outcrops of high scientific value, should be taken into account.
- d) Master plans for significant geological areas located on public lands be prepared by the Ministry of Natural Resources or by the area conservation authority as quickly as possible and that these areas be strictly protected while the master plans are being prepared.

4.6

Important Nature Areas

As part of the preparatory work for the Niagara Escarpment Plan, the Ministry of Natural Resources also identified areas of high natural and ecologic value in the original Niagara Escarpment Planning Area.

During this work, descriptive biological information was gathered for more than 600 areas. These areas were analyzed and assigned priorities to denote their relative importance.

The most important areas were those containing high quality biological environments which, on the basis of current knowledge, were unique to the Niagara Escarpment area.

Included were sites directly associated with the Escarpment, representing the vegetation of the cliffs and talus slopes. Also included were sites directly influenced by the limestone bedrock.

Many other areas were also identified, but, while they were important and significant natural habitats, they could not be classed as Escarpment-related. Most of these have not been included in the reduced area of the Proposed Plan. Information on these areas, however, is also available to planning bodies in order that local planning measures can be undertaken for their protection. Those which remain within the area of the Proposed Plan will be protected through the policies of the Plan.

Details on all these areas can be found in the Ministry of Natural Resources' Report "Significant Natural Areas Along the Niagara Escarpment, 1976".

The existing wealth of relatively undisturbed Escarpment areas is amply illustrated by a listing of just the provincially-significant category of the nature areas in the Proposed Plan. These areas are shown on Map D.

In Bruce County:

1. Cove Island
2. Bears Rump Island
3. Flowerpot Island
4. Little Cove to Cave Point
5. Willow Creek Headwaters
6. Cabot Head
7. Smoky Head-White Bluff
8. Cemetery Bog
9. Hope Bay Forests

In Grey County:

10. Slough of Despond
11. Kemble Forests and Wetlands
12. Bayview Escarpment Forest
13. Upper Beaver Valley and Eugenia Falls
14. Hogg's Falls
15. Duncan Caves
16. Duncan Lake Area
17. Skinner Bluff
18. Kimberley Creek

In Simcoe and Dufferin Counties:

19. Pretty River Valley
20. Devil's Glen Upland Forest
21. Noisy River Valley
22. Mono Centre North Escarpment
23. Violet Hill South Escarpment
24. Cannings Falls Valley Forests

In Peel and Halton Regions:

25. Dufferin Lake
26. Credit Forks
27. Caledon Mountain Forest
28. Terra Cotta-Caledon Mountain Area
29. Halton Forest North and Halton Forest South
30. Silver Creek Valley
31. Crawford Lake-Milton Outlier Valley
32. Lowville-Bronte Creek Valley
33. Mount Nemo Escarpment

In Hamilton-Wentworth and Niagara Regions:

34. Spencer Gorge Escarpment Valley
35. Dundas Valley Forest
36. Winona Escarpment Slopes
37. Beamer Valley and Grimsby Escarpment
38. Cave Springs
39. Beamsville Escarpment
40. West Vineland Valley
41. Jordan Escarpment Valley, and Marsh
42. Fifteen Mile Creek Terrace Valley
43. Short Hills
44. Fonthill Sandhill Valleys

The Proposed Plan includes measures for the maintenance of these provincially-significant areas, insofar as possible, in their natural state. These are included within the Escarpment Natural Areas designation. Many of the areas are now in public ownership, and more will be acquired in the future as part of a long-range provincial acquisition program. Many, however, are in private ownership and will remain so. Upon an owner's request, a management agreement may be entered into to assist the owner in maintaining the natural features of the property.

The extensive information which has been acquired on natural areas extends beyond the Escarpment Natural Areas designation of the Proposed Plan and, in some cases, beyond the area of the Proposed Plan itself.

This information is available to all planning bodies – municipal, regional and provincial – and should be taken into account when plans are being prepared and implemented.

Nature areas of regional significance, where they occur within the area of the Proposed Plan, are included in the Escarpment Protection Areas designation.

4.6.1

Recommendations on Important Nature Areas

The Commission recommends that:

- a) Funds be made available to bring into public ownership, as owners indicate a willingness to sell, or bring under conservation easement, the most important categories of Provincially-significant nature areas.
- b) Master plans for nature areas located on public lands be prepared by the Ministry of Natural Resources or area conservation authorities as quickly as possible, and that these areas be strictly protected while the master plans are being prepared.
- c) Voluntary agreements be sought with the owners of private lands for the protection of all categories of nature areas located on those lands. The agreements may take the form of informal understandings, formal conservation easements, tax concessions or land donations arranged through the Ontario Heritage Foundation.
- d) Research should be continued by the Ministry of Natural Resources to classify the vegetation and site representation of all nature areas.
- e) Careful attention should be paid to the locating of trails in nature areas because trails with uncontrolled access or use may be incompatible with the more sensitive portions of these areas.

4.7

Heritage

One of the objectives of The Niagara Escarpment Planning and Development Act is "to protect unique ecologic and historic areas". Because human artifacts are vital to the meaning of both ecology and history, the Proposed Plan contains Heritage policies and guidelines (Section 2.9.8) applicable to all development in the area covered by the Proposed Plan.

Man's experience on the Escarpment is reflected to us today in a variety of forms, from the fishing villages of the Bruce Peninsula to the orchards of Niagara.

The Escarpment, has for centuries, been both a barrier and a passage way. It has delayed settlement, while sustaining milling and commercial villages. It has forced roads and railways along tortuous routes, while it has funnelled traffic through natural gateways. Its precipitous slopes and shallow, rocky soils have frustrated the farmer, but have also provided him with vital water power and building materials.

While its natural resources have attracted highly-exploitative development, it has also afforded unique recreational and educational experiences.

The cultural landscapes and properties of today still show the great variety of past activity. In some cases, as with a church from the Loyalist settlement period, or a timber slide from the Georgian Bay lumbering era, we can identify features representative of past activities the reverberations of which were felt throughout the Province. In other instances, we can discover historical features at one time common in other Ontario regions, but which are preserved today only in the Escarpment area.

These are the things that are visible today.

However, there remains much that is not so readily visible, that is buried or only partially excavated, and which is only sparsely documented or not documented at all.

This is the prehistoric and early historic archaeology of the indigenous peoples of the Escarpment.

Archaeologists have divided the 11,000-year human experience along the Escarpment into five major periods from 9000 B.C. to 1650 A.D. These periods are:

The Palaeo-Indian – 9000 – 5000 B.C.

The Archaic Period – 5000 – 1000 B.C.

The Initial Woodland Period – 1000 B.C. – 500 A.D.

The Terminal Woodland Period – 500 – 1550 A.D.

The Historic Period – 1550 – 1650 A.D.

Approximately 250 archaeological sites have been identified along the Escarpment. There are certain to be many more.

The oldest archaeological sites in the Escarpment area are those of the early post-glacial peoples of the period 9000 – 5000 B.C. The larger camps are located on elevated peninsulas, beach ridges, ter-

aces, off-shore islands and bars near the margins of pre-historic Lake Algonquin in the Collingwood area. Isolated finds farther south occur above the Escarpment in such locations as Mount Nemo, Rattlesnake Point and an area west of Hamilton.

Sites of the hunters and gatherers of the Archaic Period (5000 - 1000 B.C.) are found in a wide variety of locales: in dune and sand bar locations at the northern end of the Bruce Peninsula; from Craigleith to the Pine River Valley on elevated sandy features; on glacial lands; in the upper valleys of the Pine, Boyne, Nottawasaga and Credit Rivers; between Georgetown and Hamilton near tributaries, both above and below the Escarpment; in the Milton-Lowville area; on the shore and islands of Cootes Paradise; and in the Niagara Peninsula around Jordan Harbour.

The early Woodland peoples (1000 - 500 B.C.) were thought to be migrants from the present day New York State area. A few early Woodland sites have been located in the Niagara Falls-to-Georgetown segment of the Escarpment.

Sites of the Middle Woodland peoples (500 B.C. – 500 A.D.), consisting of small villages, campsites and burial areas have been identified in the Niagara Peninsula.

The peoples of the Terminal Woodland Period (500 – 1550 A.D.) were hunters and farmers. The earlier sites of this period are small seasonal campsites and small palisaded villages. Later sites included fortified villages, of up to 0.8 hectares (2 acres), containing a dozen or so longhouses. Over the years these people extended their agricultural activities from Niagara north to the base of the Bruce Peninsula. There are at least six early village sites south of Hamilton, and ten to the north. Excavations have been carried out at only a few of them. This period of native development is important because it represents the final stage in cultural evolution prior to the onset of European trade.

The Historic Period (1550 – 1650 A.D.) reflects European influences. The average village size was 0.5 to 1.5 hectares (1 1/2 to 3 acres). The pattern developed into groups of villages clustered around large fortified towns up to 6 hectares (15 acres).

The wealth of historical and archaeological data still to be explored creates some of the most valuable opportunities in North America for the study of European impact on the native peoples of the New World.

However, archaeological sites are a non-renewable resource which is being diminished by the activities of man, mostly because he is unaware of the existence of the sites. Campsites, villages or ceremonial sites never exist alone; they are always part of a pattern of human activity. It is certain that there are many sites as yet unlocated. Of the known sites,

few have been excavated, mapped or even tested. Without excavation, it is not possible to judge the relative importance of one site over another and site priorities are difficult to establish.

The goal of archaeology is the explanation of the patterns observed. To concentrate on only the larger sites because they produce more artifacts would be short-sighted. It is important to look at the whole Escarpment area as an archaeological resource. Where proposed development is likely to destroy that resource, the Commission believes there should be an opportunity to sound a warning and either relocate the development or investigate the resource before development proceeds.

Considering the pre-historic and the historic, the cultural landscape of the Escarpment area is undergoing rapid change. It is inevitable that there be change, and this must be recognized in the planning process.

However, it should also be recognized that it is possible to retain and integrate with new development the heritage values of the area.

In this approach, public education is a high priority, as is the identification of a role for local communities and their local authorities.

The Commission believes that the development control process provides the best mechanism for the preservation and conservation of historical and archaeological resources of the area because it permits a site-by-site review.

In exercising interim development control while the Plan was being prepared, the Commission assisted in heritage conservation. The Commission also believes that additional support can be given to municipal decision-making on heritage matters.

Local Architectural Conservation Advisory Committees have been formed in some municipalities to advise on conservation under Part IV of The Ontario Heritage Act. This relates to conservation of existing structures and does not include the design of new structures. In the practice of development control for new structures, the source of heritage advice has, therefore, been provided by the Ministry of Culture and Recreation. The Commission is of the opinion that Local Architectural Conservation Advisory Committees could play a useful role in this, even though The Ontario Heritage Act does not make specific provision for it.

In archaeological matters, there seems to be little appreciation of the existence and significance of archaeological resources of the Escarpment area.

The Village of Waterdown is the only built-up area along the Escarpment which was subject to interim development control. The purpose of this was to maintain the historic character of the village core. In future, this could be achieved equally well by designating the core area as a heritage district under Part V of The Ontario Heritage Act.

4.7.1

Recommendations on Heritage

The Commission recommends that:

- a) The Ministry of Culture and Recreation place increased emphasis on a program of public education of the heritage resources of the Escarpment area, and the promotion of respect for conservation of heritage resources generally. In this connection, the Ministry of Natural Resources' interpretation programs in parks are recognized for their value in the public education concerning heritage resources.
- b) All municipalities along the Escarpment be encouraged to establish local Architectural Conservation Advisory Committees, and that these Committees be permitted to play an influential role in municipal decision-making, not only in the conservation of existing historic structures, but also in the design of new structures.
- c) The Ministry of Culture and Recreation, and Escarpment area municipalities give consideration to the formation of local Archaeological Conservation Advisory Committees to provide a resident source of advice to municipal councils on conservation of the archaeological resources of the municipality. These could be combined with the Architectural Conservation Advisory Committees to form Heritage Advisory Committees.
- d) All Escarpment area municipalities make full use of The Planning Act and The Ontario Heritage Act to ensure that local official plans identify and assess historical resources for conservation. This includes the historical information already identified by the Commission. Additional historical information should also be obtained from local research.
- e) The Ontario Heritage Foundation provide financial support to Escarpment area municipalities to ensure the effective application of Parts IV and V of The Ontario Heritage Act.
- f) The Ministry of Natural Resources ensure the systematic conservation and presentation of features representative of the Escarpment's history which exist within the Escarpment parks, either Ministry or conservation authority operated.
- g) Municipal councils designate suitable heritage conservation districts in their municipalities where they occur.

4.8

Tourism and Recreation

Because of its natural features and scenic beauty, the Niagara Escarpment is a valuable recreational resource. Its importance is heightened by its location within easy reach of urbanized southern Ontario.

The northern sectors of the Escarpment – Bruce and Grey Counties – base a major portion of their economy on the tourist and recreation industry. This economy encompasses a wide range of recreational activities: from the construction of seasonal cottages and ski chalets; to the operation of lodges, motels, campgrounds, trails and marinas; and to a variety of supporting retail, service and commercial recreational facilities.

The objectives of The Niagara Escarpment Planning and Development Act are intended to maintain precisely those features of the Escarpment area which make it valuable for tourism and recreation.

The preservation of the natural scenery and the open landscape character, the protection of unique ecologic and historic areas, the maintenance of the quality of natural streams and water supplies are among the objectives of the Act directly related to tourism and recreation. Objectives also include the requirement to provide adequate opportunities for outdoor recreation and to provide adequate public access to the Escarpment.

The provision of opportunities for outdoor recreation applies not only to public parks and other facilities, but also to the establishment of private overnight accommodations, marinas, parking lots, etc. to ensure adequate public access.

The Proposed Plan includes a wide range of policies which endeavour to achieve this proper balance between preservation of recreational resources and the development required to support tourism and recreation. The designation of Escarpment Natural Areas on the one hand and Escarpment Recreation Areas on the other illustrates this balance.

4.9

The Tobermory Islands

North of Tobermory, at the tip of the Bruce Peninsula, is a group of islands which marks the last visible portions of the Niagara Escarpment in southern Ontario before it submerges to reappear as Manitoulin Island. The Islands have been identified by the Ministry of Natural Resources as significant nature areas.

The Tobermory Islands total about 1,380 hectares (3,400 acres): ranging in size from less than 0.2 hectares (one-half acre) of rocks and trees to Cove Island, the largest, which is 930 hectares (2,300 acres).

One of the best known islands – Flowerpot – is owned by the Government of Canada, as part of the Georgian Bay Islands National Park.

The remoteness of the Tobermory Islands, to a large extent, has protected these nature habitats up to now. There are a few cottages, but these islands are virtually undeveloped. They are privately-owned except for Flowerpot.

As cottage sites on the mainland become scarce, the pressure for cottage development on the islands is mounting, despite the difficulties of access.

The Commission is convinced that these islands should be preserved in their natural state. This will require that the majority, if not all, be eventually placed in public ownership. The Commission has made strong representations to the Ministry of Natural Resources that the Islands should be acquired as soon as possible as part of the Fathom Five Provincial Park. As an alternative, the Commission has recommended an approach be made to the Government of Canada that the islands be acquired as part of the Georgian Bay Islands National Park.

While cottage development on the Islands can offer short-term economic benefits for a few individuals, the Commission is of the opinion that the maintenance of the islands in a natural state would make a far greater contribution to the overall tourist and recreation economy of the area in the long-term. The retention of these unique island-Escarpment habitats for public enjoyment would provide a most valuable resource.

The Commission's interpretation of The Niagara Escarpment Planning and Development Act leads it to the conclusion that these Escarpment-related islands should be maintained as much as possible in their natural state.

In the Proposed Plan, the Commission has placed an Escarpment Natural Areas designation on these islands. This designation will permit development of existing lots of record, if these lots can meet normally acceptable standards for development; and, if financial or other constraints rule out public purchase. Because the islands are not surveyed for lots, these policies cannot technically be applied to them. If any limited development is to be permitted on the islands, in the event that public purchase cannot be negotiated, special development criteria will have to be prepared. These criteria will also apply to the mainland-based supporting services.

4.9.1

Recommendation on the Tobermory Islands

The Commission recommends that:

The Tobermory Islands be acquired. If this cannot be accomplished by the Government of Ontario alone, then the Commission encourages and welcomes the participation of Parks Canada. If, by the time the public review and hearings on this Proposed Plan have been completed, there has been no substantial progress made towards public ownership of the Islands, the Commission may have no alternative but to recommend that limited development be permitted in accordance with criteria to be developed jointly by the Bruce County Council and the Province of Ontario.

4.10

Forestry

The Niagara Escarpment Planning Area contains parts of the Great Lakes-St. Lawrence Forest Region and the Deciduous Forest Region.

The Great Lakes-St. Lawrence Forest Region extends from Tobermory in the north to Milton in the south. From there to the Niagara River is the Deciduous Forest Region. There is a transitional area around Milton where the species of each region occur as a mixture. The maple, beech, elm, pine and hemlock of the north mix with the tulip, walnut, sassafras and hickories of the south.

Much of the Escarpment area, which is unsuitable for agriculture, has remained with a forest cover.

The retention and improvement of these forests are considered by the Commission to be important, because of the contribution they make to the environmental objectives of the Act. Unique ecologic areas are protected by forest cover, while the same cover maintains the quality and character of streams and water supplies which originate on the Escarpment. The forests are also assets for outdoor recreation. They enhance the character and natural scenery of the Escarpment by adding diversity of colour, pattern and form.

The forests of the Escarpment can also be commercially important. At one time, the Escarpment forests were of major commercial significance, but indiscriminate cutting depleted much of this resource. By careful regulation of the use and development of forests, the Commission believes that much of the commercial value can be restored.

In the Preliminary Proposals, the Commission undertook to identify the larger forested areas and to propose land use regulations for them. The Commission found that the data available was too approximate and that the application of this data for specific sites was unreliable. The Commission concluded that this approach could perhaps only be used in detailed local municipal planning, where site adjustments are more readily made.

The Commission, therefore, has opted for a different approach in the Proposed Plan.

Forested areas, which include important Escarpment-related habitats, are included in the Escarpment Natural Areas and Escarpment Protection Areas designations. Overall, however, there is no attempt to have specific area designations for the maintenance of forest cover. Instead, the Commission has proposed the strengthening of and additions to existing programs to create and manage forests. The Commission's view is that landowners along the Escarpment, if provided with incentives, will see to the retention and the expansion of the forest cover. The Commission has included, in the land use policies, development criteria applicable to forest management (Section 2.9.9).

Although the Ministry of Natural Resources has identified important natural habitats, which warrant special measures for protection; the Ministry has not imposed policies to prohibit tree cutting in those habitats now managed by the Ministry or by conservation authorities. The Commission considers that this situation should be rectified as soon as possible.

4.10.1

Recommendations on Forestry

The Commission recommends that:

- a) The Woodlands Improvement Act program of the Ministry of Natural Resources be sustained and sufficiently expanded to meet the objectives of The Niagara Escarpment Planning and Development Act.
- b) County tree-cutting by-laws be maintained and strengthened.
- c) Forest operations be subject to permits. Owners wishing to cut wood for their own domestic purposes, safety, or to remove dead-wood, will not require a permit. (Section 2.9.9).
- d) The Ministry of Natural Resources proceed to identify and establish those portions of important nature habitats which are in public ownership in which tree cutting should be prohibited, except where required for wildlife management.
- e) The Ministry of Natural Resources promote its Forest Advisory Service to Escarpment area landowners. Under this program, a landowner may obtain advice from the Ministry, free of charge, and without signing a Woodlands Improvement Act agreement. Through this Forest Advisory Service, the Ministry evaluates woodlots, marks trees for cutting, provides volume and value estimates and helps landowners find markets.

4.11

Wildlife

The Niagara Escarpment area is the most important reservoir of wildlife in southern Ontario.

It includes the largest, roughly continuous strip of forest left in southern Ontario. It includes vegetation ranging from southern hardwoods to northern hardwoods and mixed woods, as well as orchards, pastures and some wetlands.

This diversity of habitat means, in turn, a diversity of wildlife.

Fifty-three resident species of mammals have been identified in the Escarpment area.

Escarpment crevice caves are habitats unique to the area and are used in winter by hibernating mammals, primarily bats.

About half of the 320 bird species found along the Escarpment also make it their nesting area. This large and diverse bird population is typical of a habitat which extends into two forest regions. Some species, such as the pine siskin and winter wren, breed in the northern part, while the barn owl and northern mockingbird breed in the southern section. Others breed throughout the entire length of the Escarpment.

The turkey vulture is a bird especially well-known on the Escarpment, often seen soaring parallel to Escarpment cliffs as it searches for carrion.

The area also provides vital resting and feeding areas for migrating birds.

Because of extensive destruction of wildlife habitats elsewhere in Ontario, the Escarpment area is a significant refuge for 36 known species of reptiles and amphibians. These include the Massasauga rattlesnake which is endangered, the northern milk snake, the northern ring-necked snake, the queen snake, the eastern hog-nosed snake, the pickerel frog, the spotted turtle and the wood turtle.

Game species and furbearers are also important because of their recreational and economic value. Deer are common and thrive throughout the area. Woodcocks, ruffed grouse, snowshoe hares and European hares are also abundant.

The Ministry of Natural Resources has identified 70 areas of special importance to wildlife in the original Planning Area assigned to the Commission. This identification is included in the Ministry report "Wildlife in the Niagara Escarpment Planning Area, 1977". Not all of these areas remain within the reduced area of the Proposed Plan; however, information on these areas is available to municipalities in order that provisions for their protection can be included in local plans.

The Proposed Plan, through its Natural Areas designation and land use policies, aims for the maintenance of these key wildlife habitats.

In addition, the recommendations of the Commission with respect to forestry programs are oriented to the improvement and extension of wildlife habitats.

4.11.1

Recommendations on Wildlife

The Commission recommends that:

- a) The Extension Program of the Wildlife Branch of the Ministry of Natural Resources be modified to provide a service to landowners who may not want hunting on their land, but who are interested in improving the wildlife population for the other recreational benefits derived from it. (This program was set up to assist landowners in improving their land for wildlife. Expert advice, information and wildlife-sustaining shrubs are available to the landowner. However, the emphasis is on expanding opportunities for hunting, and landowners participating in the program are encouraged to allow hunting on their land.)
- b) The key wildlife areas identified in the report "Wildlife in the Niagara Escarpment Planning Area" be made priority targets for study under the Endangered Species Program of the Ministry of Natural Resources (This program aims to identify species for inclusion in the Regulations under The Endangered Species Act, 1971. Included are species which are rare, endangered or vulnerable to man's activities.)
- c) Because the variety of wildlife and wildlife habitats in the Escarpment area lends itself to interpretation of or education about wildlife, the Ministry of Natural Resources should establish interpretative programs in Ministry-managed areas, and actively promote the expansion of these programs by conservation authorities on conservation authority lands.
- d) A Wildlife Management Program be developed for upland game birds and the existing program for deer receive additional emphasis by the Ministry of Natural Resources.

4.12

Fisheries

The Escarpment plays an invaluable role as a contributor to sport fishing in southern Ontario.

The headwaters of virtually every major trout stream in Bruce, Grey, Simcoe and Dufferin Counties flowing into Georgian Bay, originate along the Escarpment. These streams have relatively good water quality and support sizeable populations of resident brook and brown trout. They also carry the spawning runs of very large numbers of rainbow trout and lesser numbers of salmon. Further south, tributaries of important fishery streams flowing into Lake Ontario, such as the Credit River and Bronte Creek, also originate on the Escarpment.

The sport fishery of the Escarpment area is described in the Ministry of Natural Resources' report "Fisheries Resources of the Niagara Escarpment Planning Area".

This report notes that in 1971 there were recorded 2.8 million man-days of fishing, described as "fishing days", in the counties through which the Escarpment runs. An indication of the economic importance of this recreational activity to Grey and Bruce Counties is that more than half of this total – 1.6 million "fishing days" – took place in these two counties, with 65 per cent representing fishermen from outside these counties.

The land use policies of the Proposed Plan aim to protect the streams which flow through the Escarpment or originate on it. The forestry policies, controlling erosion and the maintenance of stream cover, are designed to improve the quality of these streams. Cold water streams are particularly sensitive.

However, the area covered by the Proposed Plan encompasses only a relatively small portion of the length of these streams. The Commission believes that measures for the protection and improvement of these important resources must also be a part of the plans of Escarpment area municipalities.

Cyprus, Cameron and Crane Lakes in Bruce County, and Gleason, Gowan and Bass Lakes in Grey County, have been identified by the Ministry of Natural Resources as being significant to the sport fishery. These are totally within the area of the Proposed Plan.

Other lakes and streams have also been identified as significant to the sport fishery, but these are partially outside the area of the Proposed Plan.



4.12.1

Recommendation on Fisheries

The Commission recommends that: Escarpment area municipalities provide measures in their planning for the protection of significant sport fisheries outside of the area of the Proposed Plan, as follows:

Bruce County
George Lake
Gillies Lake
Britain Lake
Judges Creek
Colpoys Creek

Grey County
Oxenden Creek (Gleason Brook)
Indian Creek
Mud Creek
Pottawatomi River
Maxwell Creek
Sydenham River
Telfer Creek
Keefer Creek
Waterton Creek
Johnson Creek
Bighead River
Walters Creek
Rocklyn Creek
Minniehill Creek
Beaver River
Indian Brook
Mitchell Creek
Silver Creek

Grey and Simcoe Counties (in both)
Pretty River
Mad River

Simcoe County
Batteaux River

Dufferin County
Pine River
Boyne River
Sheldon Creek
Nottawasaga River

Dufferin County – Peel Region (in both)
Humber River

Peel Region
Centreville Creek

Peel and Halton Regions (in both)
Credit River

Halton Region
Snows Creek
Silver Creek
Rogers Creek
Oakville Creek
Bronte Creek

Niagara Region
Twelve Mile Creek

4.13

Agriculture

The original Planning Area prescribed by Ontario Regulation 118/74 included large acreages of good agricultural land. In keeping with the Provincial policy to preserve good agricultural land, the Commission originally considered making provisions for preserving agricultural land where it occurred.

Accordingly, in 1978, the Commission's Preliminary Proposals identified Class I to III, or equivalent, agricultural land; tender fruit lands in the Niagara Peninsula; and orchard lands in Grey County. The Preliminary Proposals also included policies to maintain these lands in agricultural use.

One of the problems with this approach was that the municipalities had not yet established comparable policies for the maintenance of agricultural lands throughout the remainder of the municipality. Therefore, it appeared that it was only within the Niagara Escarpment Planning Area that a strong land use policy to maintain agricultural land was being proposed.

While the maintenance of good farmland in agricultural use contributes to the objectives of The Niagara Escarpment Planning and Development Act to maintain the open landscape character of the area, the maintenance of agricultural lands was not itself an objective of the Act. The emphasis in the Preliminary Proposals on the designation and maintenance of good agricultural lands was, therefore, seen by many as a diversion from the goal.

The publication of The Ontario Food Land Guidelines by the Ontario Ministry of Agriculture and Food now provides a framework for municipal planning policies in the identification and maintenance of prime agricultural land throughout the Province.

The area of the Proposed Plan includes some good agricultural land, but only because that land is directly related in other ways to the Escarpment. The amount of good agricultural land in the revised area for the Proposed Plan is now relatively small. The Commission, therefore, did not consider it necessary to include a specific designation for agricultural land.

Where appropriate, the policies of the Proposed Plan are intended to be supportive of the principles expressed in The Ontario Food Land Guidelines. The maintenance of agricultural land in the area for the Proposed Plan can be achieved by Escarpment area municipalities through the application of The Ontario Food Land Guidelines.

4.14

Transportation and Utilities

The area for the Proposed Plan intersects a number of communities and is not, by itself, an economic and social unit. It does not have a need for its own internal transportation and utility networks. Instead, it is subject to the transportation and utility needs of various communities not necessarily directly associated with the Escarpment.

The sources of these needs are outside the area and influence of the Proposed Plan. It is not practical to consider the Escarpment area as a barrier through which no further transportation and utility routes can pass. Instead, it is a question of reducing the adverse effects of such routes when they must be established.

The Proposed Plan makes provision for this in two ways. It identifies Escarpment Natural Areas that should be avoided when new transportation and utility routes are being planned. Secondly, it provides for an approval process for projects depending on size, either under The Environmental Assessment Act or under The Niagara Escarpment Planning and Development Act.

The development criteria for transportation and utility facilities are described in Section 2.9.10.

4.14.1

Recommendation on Transportation and Utilities

The Commission recommends that:
New transportation and utility facilities should avoid Escarpment Natural Areas.

4.13.1

Recommendation on Agriculture

The Commission recommends that:
The Ontario Food Land Guidelines be applied by municipalities for maintaining good agricultural land.

4.15

Mineral Resources

The industrial mineral resources of the Escarpment area include dolostone-limestone, sand and gravel, sandstone, shale and clays.

Dolostone-limestone is used for production of crushed stone, building stone, as a fluxing agent in metal, glass and cement and as a furnace liner. Crushed stone is mainly used as an aggregate in concrete, rail ballast, road construction, sewage filter beds, and, in finer forms as poultry grit, stucco, manufactured sand and lime.

Sand and gravel are used mainly as a concrete mix for the construction of roads, buildings, houses, etc. Fine varieties of sand are also used as land fill.

Shale and clays are used in the production of brick, tile, sewer pipes and light-weight aggregates.

Sandstone is used mainly for production of building stone and silica grit. Sandstone has also been used in the buildings at Queen's Park and elsewhere in Ontario. Most sandstone reserves have already been exhausted and only a few small quarries remain. Those sandstone reserves which exist in the Limehouse-Terra Cotta area of Halton and Peel are subject to severe environmental constraints.

The term "effective reserves" is used to describe the estimated quantity of identified minerals in the ground which might be available for extraction, while also recognizing current social and other constraints. Estimates of the effective reserves in the original Niagara Escarpment Planning Area were provided to the Commission by the Ministry of Natural Resources. High, medium and low priorities were assigned to these estimates to denote their economic importance. The estimate of high priority reserves in the area was 30.8 billion Tonnes (34 billion tons) of crushed stone, 6.17 billion Tonnes (6.8 billion tons) of sand and 3.1 billion Tonnes (3.4 billion tons) of gravel.

The Ministry made predictions of the future demand for aggregate. Based on an average of 3.5 per cent economic growth rate per year, the demand was projected to increase from 24.4 million Tonnes (26.9 million tons) per year in 1976 to 57.5 million Tonnes (63.4 million tons) per year in 2001.

To stimulate growth and competition in the mineral extraction industry, the Ministry applied a factor of five times the projected demand as an allowance for fluctuations in price, quantity and quality of the aggregates. This factor was based on experience and on mining and exploration practices. It meant that to satisfy five times the projected total demand to the year 2001, the potential available supply of aggregates in the original Niagara Escarpment Planning Area would have to be maintained in the range of 4.5 to 5.4 billion Tonnes (5 to 6 billion tons).

In addition to the information provided by the Ministry, the Commission also examined a report commissioned by the Clay Brick Association of Canada entitled "The Clay Brick Industry and the Shale Resources of Ontario". This report includes a mapping of shale reserves both inside and outside the area of the Proposed Plan.

The estimated demand for shale to year 2001 is in the range of 35 to 55 million Tonnes (40 to 60 million tons), with much of it to be supplied from the Escarpment area. However, the Commission noted that there are extensive shale reserves identified outside the Escarpment area, e.g. in Halton Region. It is the view of the Commission that these shale reserves, plus those now licensed and those now within the Escarpment Rural Areas should be adequate to meet the estimated demands to year 2001.

However, in view of the provisions of The Niagara Escarpment Planning and Development Act, the Commission considered it appropriate to begin with an assessment of where mineral extraction should not be permitted in the Escarpment area for environmental and other reasons. Once this had been done, the Commission would be in a better position to judge the effect of these restrictions; whether or not they would be unduly prohibitive considering the importance of the Escarpment as a source of mineral aggregate; and whether or not some relaxation of constraints should be considered.

When the Commission was formed, the Ontario Government also established a Pits and Quarries Restrictive Zone. Within this Zone, no new pits and quarries were to be permitted. This Restrictive Zone was to be reviewed by the Commission and any necessary changes were to be made when the Niagara Escarpment Plan was adopted.

Based on the data provided by the Ministry of Natural Resources, the Commission has ascertained that there is available within the Escarpment Rural Areas of the Proposed Plan, and in the areas currently licensed for mineral extraction, an estimated 22.7 billion Tonnes (25 billion tons) of high priority effective reserves of mineral aggregate. This would more than meet the projected demands to year 2001.

The Commission, therefore, considers that the Escarpment Natural Areas and the Escarpment Protection Areas of the Proposed Plan should now form the revised Pits and Quarries Restrictive Zone, in which new pits and quarries (except wayside pits) shall be prohibited. Wayside pits may occur in the Escarpment Protection Areas.

There is also the question of existing licensed areas. The direction on this from the Government of Ontario in 1973 was that, if a licensed pit or quarry was found by the Commission to be in serious conflict with the goal and objectives for maintaining the natural environment of the Escarpment, "the Government will work with the operator to seek an alternative location".

In the area of the Proposed Plan there are extensive areas now licensed for extraction. From an environmental point of view perhaps some of these operations should not have been licensed in the first

place, but the characteristics of the area have now been altered. The Commission's view is that it would be preferable to permit existing operations to continue to the conclusion of the period of the licence and then to rehabilitate them, rather than to open up new sites elsewhere.

There is, however, room for adjustment in the site plans of a number of existing licences to reduce the environmental impact of the operations. The Ministry of Natural Resources and the conservation authorities have already identified these areas of sensitivity. The proposed Aggregates Act includes provisions for the relicensing of existing pits and quarries. When this relicensing occurs the Ministry of Natural Resources should ensure that the necessary adjustments be made to site plans, and possibly to the licences themselves, to protect these environmentally sensitive areas. Also, in this relicensing, the rehabilitation plans should be revised where they are now inadequate.

There exists in the Escarpment area, a considerable number of abandoned pits and quarries which were never rehabilitated. Nature has done its best to heal the scars, but needs help. The Commission endorses the measures for rehabilitation of abandoned pits and quarries contained in the proposed Aggregates Act. In the area of the Niagara Escarpment Plan the monies obtained from current extractive operations should be used for rehabilitation of abandoned pits and quarries in that area, before the funds are applied elsewhere.

While the existing licensed pits and quarries along the Escarpment, and high priority effective reserves in the Escarpment Rural Areas, can provide substantial quantities of aggregate for many years, the Escarpment should not be looked upon for all times as a primary source of aggregate. Even with the best rehabilitation, there are limits to the amount of mineral extraction that the Escarpment area can withstand if the objectives of The Niagara Escarpment Planning and Development Act are to be maintained.

Alternatives are required. Three of the most common ideas are:

1. Dredging for sand and gravel in Lake Ontario.
2. Underground mining for limestone and dolostone.
3. Excavating Precambrian rocks of the Canadian Shield.

There are known to be large quantities of sand and gravel in the Great Lakes. Dredging for this material has not been evaluated in any detail and costs and tonnage of available materials are not known. Because of the shortage of sand and gravel resources in the Hamilton-Wentworth and Niagara

Regions, the sand deposits in Lake Ontario near Toronto should be of special interest. An examination of this potential source of mineral aggregate should be undertaken.

Underground mining of flat-lying sedimentary material has been and is being carried out in southern Ontario. Two gypsum mines, at Caledonia and Hagersville, and the Sifto Salt Limited mine at Goderich, are essentially underground quarries. Underground mining of limestone and dolostone has not taken place in southern Ontario because of economic considerations and because surface deposits have been readily available.

According to studies commissioned by the Ministry of Natural Resources, there exists under the Toronto area, at a depth of approximately 300 metres (1,000 feet), quantities of limestone which might be mined. As transportation costs for material from surface deposits increase, a point could be reached where the underground mining of this material might be economically feasible. The possible use of the mined-out areas for warehousing, frozen food storage, storage of gas and liquids could offset some of the costs of this method of mining.

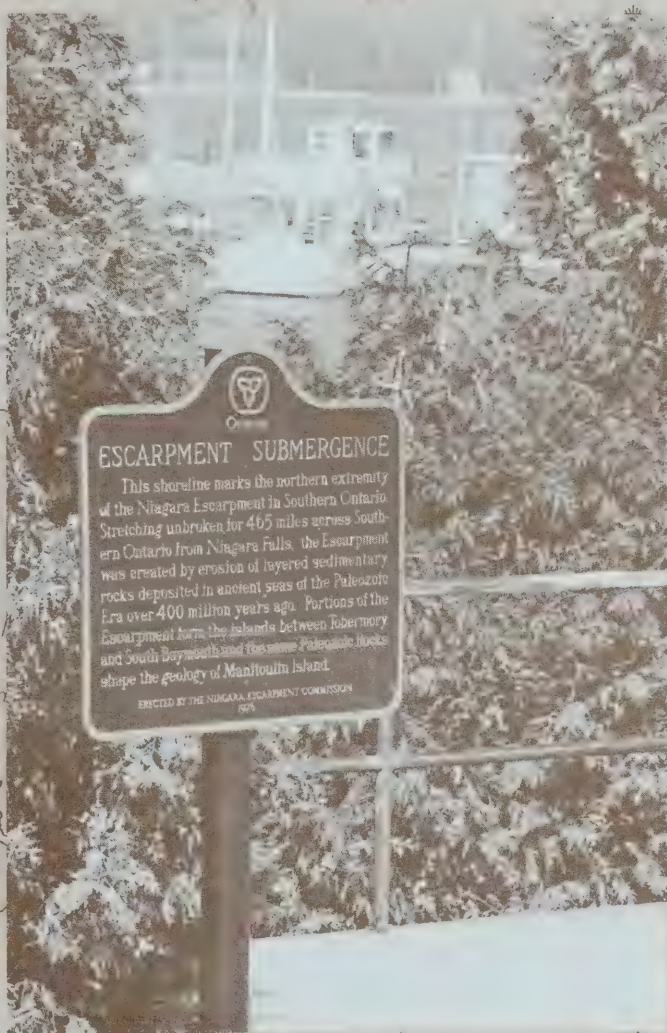
The point is being reached where some site-specific feasibility studies of this method of mining should be undertaken.

4.15.1

Recommendations on Mineral Resources

The Commission recommends that:

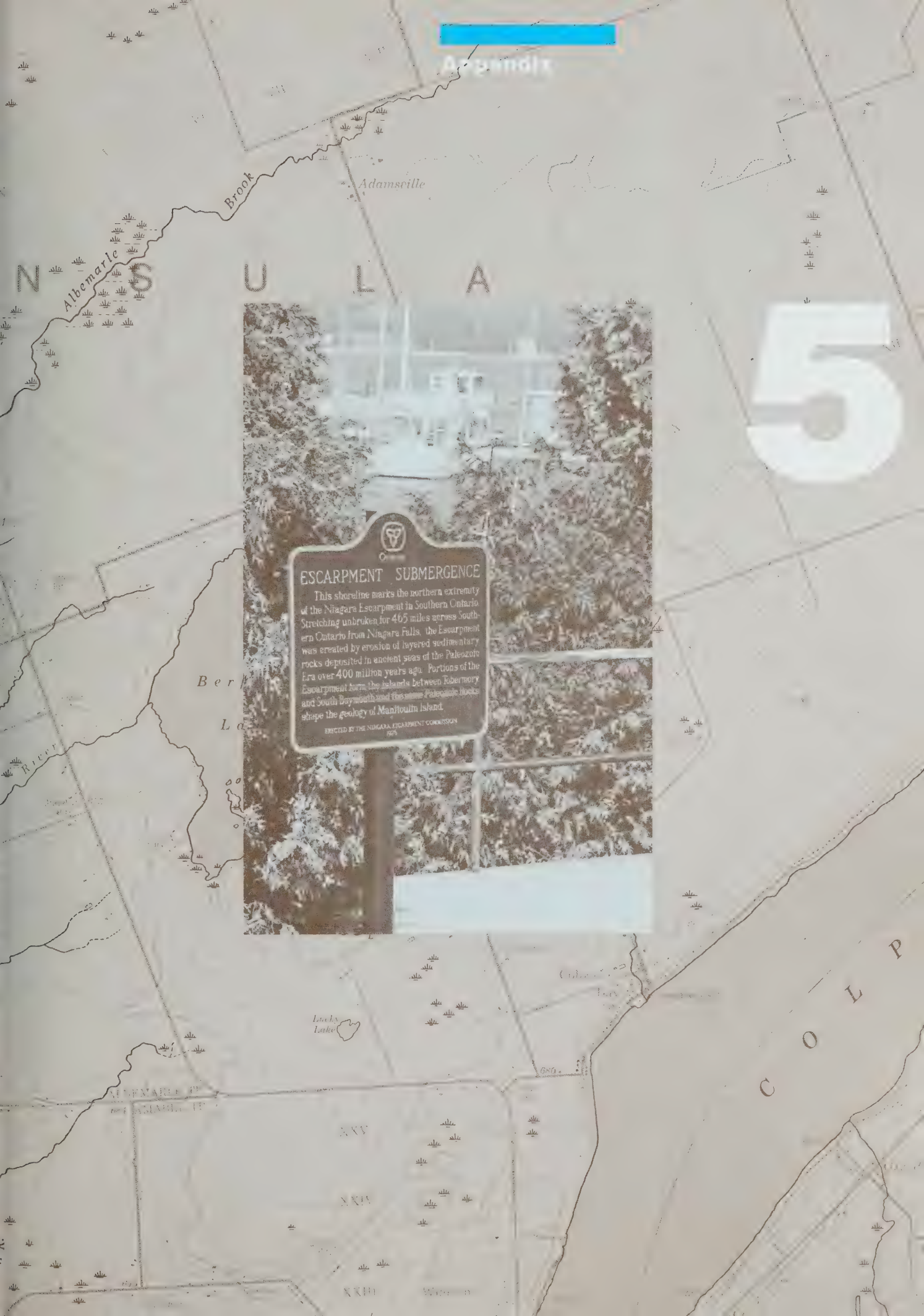
- a) Funds available for rehabilitation of abandoned pits and quarries which have been obtained from Escarpment operators be used for rehabilitation of abandoned sites in the Escarpment area before they are used elsewhere.
- b) Mineral extraction in the designated Mineral Resource Areas be limited to high quality material and the Escarpment not be used as a source of low quality landfill. Low quality material should be retained on site for rehabilitation.
- c) The Ministry of Natural Resources develop alternatives to continue large scale mineral extraction from the Escarpment area by either undertaking feasibility studies or providing incentives to private industry to do so, on dredging for sand and gravel in Lake Ontario, underground mining of limestone, and the use of Precambrian material from the Canadian Shield.
- d) The Pits and Quarries Restrictive Zone defined by the Government of Ontario be the Escarpment Natural Areas and Escarpment Protection Areas of the Niagara Escarpment Plan, except for wayside pits. Wayside pits may occur in the Escarpment Protection Areas.
- e) The Escarpment not be considered a permanent source of aggregate.



ESCARPMENT SUBMERGENCE

This shoreline marks the northern extremity of the Niagara Escarpment in Southern Ontario. Stretching unbroken for 465 miles across Southern Ontario from Niagara Falls, the Escarpment was created by erosion of layered sedimentary rocks deposited in ancient seas of the Paleozoic Era over 400 million years ago. Portions of the Escarpment form the islands between Tobermory and South Baymouth and the same Paleozoic rocks shape the geology of Manitoulin Island.

ERECTED BY THE NIAGARA ESCARPMENT COMMISSION
1975



5.1

A Biographical Sketch of Current and Former Commission Members

Chairman

Ivor McMullin was appointed Chairman of the Niagara Escarpment Commission in December 1975 by Premier William Davis. A member of the Commission since its inception, Mr. McMullin is a former mayor of Caledon, a former reeve of Albion Township and a former warden of Peel County. He is a life member of the Metropolitan Toronto and Region Conservation Authority. Mr. McMullin lives in Caledon East where he has operated a beef farm for a number of years.

Representing Counties and Regional Municipalities

Lloyd Adams is a councillor for St. Edmunds Township and a member of the Bruce Peninsula Planning Board. He is a former member of the Bruce County Land Division Committee and a former chairman of the Bruce Peninsula Committee of Adjustment. Mr. Adams is a motel owner in Tobermory. He represents the County of Bruce.

Roy Booth is a councillor for the Town of Halton Hills and its representative on Halton Regional Council. He has been active in conservation-related activities and was a member of council for the former Town of Georgetown. He was also chairman of the Halton Hills Planning Board and is currently chairman of the Halton Region Planning Committee. Mr. Booth represents the Regional Municipality of Halton.

Ivan Buchanan is a former regional councillor in Niagara. He has been involved in municipal politics for 38 years and is a former mayor of St. Catharines. Mr. Buchanan is the representative of the Regional Municipality of Niagara.

Edgar Currie has served as a member of the Nottawasaga Township Council for 15 years and was the warden of Simcoe County in 1975. He is a former member of the Nottawasaga Planning Board and was its chairman for two years. Mr. Currie is the representative for Simcoe County.

Paul Gallagher has served on Mulmur Township Council for eight years, for two years each as a deputy reeve and reeve, during which period he was also a member of the Dufferin County Council. He is also a member of the Mulmur Planning Board. Mr. Gallagher farms in Mulmur and is the representative for Dufferin County.

Robert Mackey is a St. Vincent Township councillor. He is chairman of St. Vincent Planning Board and chairman of the Grey County-Owen Sound Planning Board. Mr. Mackey, an Ontario land surveyor, represents Grey County.

Robert McNairn former reeve of Waterdown, has been active in municipal politics for over 30 years. He is a former member of the Hamilton-Wentworth Planning Board and is the current chairman of the Waterdown Public Utilities Commission. He is in the general insurance business in Hamilton and represents the Regional Municipality of Hamilton-Wentworth.

Alex Raeburn is a former Peel regional councillor and former chairman of the Peel Public Works Committee. He is a member of the Credit Valley Conservation Authority, and was former Chairman of the Caledon Township Area School Board. Mr. Raeburn, who has been in active municipal politics for 15 years, is the representative for the Regional Municipality of Peel.

Representing the Public-at-Large

Robert Bateman is a professional artist and former art teacher, who has held major exhibitions of his paintings in Canada, England, the United States and Kenya. Mr. Bateman has also designed three endangered species Canadian postage stamps: the Eastern Cougar, the Peregrine Falcon and the Bowhead Whale. He is a former director of the Hamilton Naturalists' Club and the Sierra Club.

Leo Bruzzese was a former alderman for five years in the town of Pelham and was chairman of the town's Planning Committee. He is executive vice-president of a St. Catharines radio station and a public accountant in Welland.

Gary Harron is reeve of Amabel Township and former warden of Bruce County. A member of Amabel's Planning Board, he is now a member of the Bruce Peninsula Planning Board. Mr. Harron farms in Bruce County.

Robert Keast is a former mayor of Thornbury and a former chairman of the Grey County-Owen Sound Planning Board. He is chairman of the Grey County Land Division Committee and is a member of the Beaver Valley Planning Board.

Bernice Limpert is reeve of the Town of Wiarton, chairman of the Finance Committee and member of the Planning Committee of Council. She is a former chairman of the Agriculture and Tourism Committee of Bruce County and is currently a member of the Grey Bruce Tourist Council and the Bruce Peninsula Planning Board. Mrs. Limpert is a former newspaper manager and hotel owner.

Raymond Lowes is secretary of the Bruce Trail Association. He is a member and former director of both the Federation of Ontario Naturalists and the Hamilton Naturalists' Club. Mr. Lowes also belongs to the Sierra Club, the Canada Nature Federation and the Conservation Council of Ontario.

Anne MacArthur is a former mayor of the Town of Milton. A former high school teacher, Mrs. MacArthur was a member of the Nassagaweya Township Council for nine years and a former warden of Halton County.

Lee Symmes is a retired farmer and lives in the Terra Cotta area. He is a member of the Conservation Council of Ontario, the Sierra Club and the Federation of Ontario Naturalists. He was also a member of the Interested Citizens Advisory Committee to the Parkway Belt West Master Plan.

Former Commission Members

John Boeckh served the Commission as a representative of the public-at-large from November 1973 until his resignation in May 1978. He is a resident of the Town of Caledon, and is a former member of Caledon Township council and planning board.

John Bradshaw was appointed to the Commission in November 1973 to represent the public-at-large. He is a well-known writer and broadcaster and Fellow of the Royal Horticultural Society. He resigned from the Commission in February 1975.

Robert Bush representing Simcoe County, served on the Commission from November 1973 until ill health forced his retirement in June 1976. He is a former member of Collingwood's first planning board and the Simcoe County planning committee and served on Collingwood municipal council and Simcoe County Council for several years. Mr. Bush, a former newsman, is a native of Collingwood.

John ("J.P.") Johnstone was appointed to the Commission in November 1973 to represent the County of Bruce. He was reeve of St. Edmunds Township for 12 years, a warden of Bruce County and a chairman of the Bruce Peninsula Planning Board. He was a resident of Tobermory for more than 25 years until his death in April 1978.

Theodore Parker represented the County of Dufferin from November 1973 until his death in January 1976. Mr. Parker was a member of Mono Township planning board and secretary of Mono's committee of adjustment.

George R. McCague was the Commission's first Chairman. Prior to his appointment in September 1973 he served the Town of Alliston from 1960 as councillor, deputy reeve, reeve and mayor. He was warden of Simcoe County in 1969. He also served on the Alliston planning board, public school board, Georgian Bay Regional Development Council, Notawasaga Valley Conservation Authority and was the founding chairman of Georgian College in Barrie. Mr. McCague resigned in August 1975 to seek a seat in the Provincial Legislature.

James Swanborough represented the public-at-large on the Commission from November 1973 until his resignation in October 1976. Mr. Swanborough is a former reeve of Burlington and warden of Halton County.

Definitions

6



6.1

Definitions

The following definitions have been compiled to assist the reader with the interpretation of the Proposed Plan.

Abandoned Pit or Quarry – a pit or quarry which no longer is the subject of a licence or a wayside permit and has not been rehabilitated.

Accessory Building or Structure – a detached building or structure that is not used for human habitation, the use of which is naturally and normally incidental to, subordinate to, or exclusively devoted to a principal use or building and located on the same lot.

Aggregate – gravel, sand, clay, shale and stone.

Agricultural Operation – the carrying out of an agricultural use.

Agricultural Use – the land, building or structure used for the purpose of animal husbandry, horticulture, beekeeping, dairying, fallow, field crops, fruit farming, fur farming, market gardening, pasturage, poultry keeping or any other farming use and may include the growing, raising, packing, storing of produce on the premises and other similar uses customarily carried out in the field of general agriculture.

Agriculture – the production of food or fibre.

Aquifer – a geologic formation or structure which holds water and/or allows water to percolate through it (e.g., sands, gravel, fractured rock) and serves as a source of water supply.

Archaeological Activities – the studying, uncovering, recording, restoring and rehabilitation of archaeological sites and artifacts.

Badlands – an area nearly devoid of vegetation where erosion has cut the soil or soft rock leaving a maze of gullies and crests.

Carrying Capacity – the limit of human activity which an area(s) can sustain before biological, physical or perceptual deterioration in quality occurs.

Compatible – where the building, structure, activity or use blends, conforms or is harmonious with the ecological, physical and cultural environment.

Conservation – the management of an environment in a way which will restore, enhance, protect and maintain its quality and quantity for the benefit of the environment now and into the future.

Conservation Easement – an interest in the land negotiated by an agency (Ministry of Natural Resources, conservation authorities, municipalities, etc.) which allows the easement-holder specified uses or rights without actual ownership of the land. These rights would pertain to keeping the land in open use or a natural state, or provide some other conservation or recreation function.

Cultural Landscape – the land use/land cover product of man's activities over time in modifying the landscape for his own purpose. A cultural landscape is perceived as an aggregation of man-made features such as a village, farmland, waterways or transportation corridors.

Cultural Property – features in or on the land or underwater and considered to be a consultable record of past human activities, endeavours or events, e.g., buildings, street furniture, engineering works, planting and archaeological sites, etc.

Deer-Wintering Yards – the area where deer herds congregate during the winter months to forage for food and obtain shelter.

Drowned Valley – a valley which has been submerged by the advance of a lake, owing to the sinking of the land or the rise of the lake, e.g., Colpoys Bay.

Drumlin – an elongated hill or ridge, usually oval in shape generally consisting of sands and gravels deposited by the lateral movement of the glacier. The long axis of the drumlin is parallel to the direction of the flow of the glacier.

Dwelling Unit – one or more habitable rooms designed for the use of one family in which sanitary facilities and one kitchen are provided for the exclusive use of such family, and having a private entrance.

Easement – a negotiated interest in the land of another which allows the easement-holder specified uses or rights without actual ownership of the land.

Ecology – the inter-relationships of life forms to one another and to their environment.

Environment – the sum total of all the biological and physical conditions which influence and act upon all life forms.

Environmental Monitoring – the continuous review of an environmental condition according to an established norm to detect change.

Escarpment Brow – the upper portion of the Escarpment where it forms a cliff or begins a slope.

Escarpment Landforms – the physical features of the land associated with the Escarpment and created by post glacial erosion, sedimentation and glaciation, and may include such features as moraines, lakes, river valleys, beach ridges and drumlins, etc.

Escarpment Slope (Face) – the sloping portion or cliff face of the Escarpment below the brow or height of land to the toe of the slope.

Escarpment Toe – the apparent break in slope to the horizontal plane.

Existing Lot of Record – a lot held under distinct and separate ownership from all abutting lots as shown by a registered conveyance in the records of the Registry or Land Titles Office at the time of the approval of the Niagara Escarpment Plan by the Government of Ontario.

Farm Cluster – the group of farm buildings, including the farm dwelling, on a property actively carrying out an agricultural operation.

Fauna – animal life including mammals, birds, fish, reptiles, insects, molluscs, etc.

Flora – plant life.

Forest Management (Forestry) – the management of forests to maintain, restore or enhance environmental conditions for wildlife; protection against floods and erosion; protection of water supplies; and the production of wood and wood products in certain areas.

Groundwater Infiltration Area (Recharge Area) – an area where the porous nature of the surface and subsurface allows water to percolate through to an aquifer.

Hazard Lands – areas having inherent physical/environmental characteristics such as poor drainage, organic soils, susceptibility to flooding or erosion, steep slopes and other physical limitations to development which could cause property damage or loss of life, if developed.

Headwaters – the source area of a stream.

High Water Mark – the mark made by the action of water under natural conditions on the shore or bank of a body of water which action has been so common and usual that it has created a difference between the character of the vegetation or soil on one side of the mark and the character of the vegetation and soil on the other side of the mark.

Implementing Body – the body/bodies responsible for the administration of the Niagara Escarpment Plan.

Indicator – a sign or symptom associated with a particular environmental condition that is used to detect environmental change.

Institutional Use – use of land, building or structure for some public or social purpose, but not for commercial purposes, and may include governmental, religious, educational, charitable, philanthropic, hospital or other similar or non-commercial uses to serve the immediate community.

Karst Pavement – a limestone plateau generally marked by sink holes or karst holes, through which rain water disappears beneath the surface creating underground streams and caves.

Kettle Lake – a lake created by the melting of a large mass of ice buried during glaciation, thus creating a bowl shaped depression filled with water.

Lot – a parcel or tract of land

a) which is a lot as shown on a Registered Plan of Subdivision excepting those lots which have been deemed not to be so under a by-law passed pursuant to Section 26 of The Planning Act, being Chapter 296 of the Revised Statutes of Ontario, 1960, as amended, or

b) which is a separate parcel of land without any adjoining lands being owned by the same owner or owners as of the date of approval of the Niagara Escarpment Plan, or

c) the description of which is the same as in a deed which has been given consent pursuant to Section 26 of The Planning Act, being Chapter 296 of the Revised Statutes of Ontario, 1960, as amended.

Meltwater Channel – a depression worn by the flow of water from the melting of glacial ice.

Meltwater Deposit – the deposits, generally sands and gravel, resulting from the melting of glacial ice.

Meromictic Lake – a lake where the water is so deep in comparison to the size of the lake that the lower levels of water are not disturbed by wind, temperature change or by the movement of aquatic creatures. The undisturbed sediments on the bottom of such lakes provide scientists with a complete record of the history of the area.

Moraine – the debris or fragments of rock material deposited by direct glacial action creating hummocky terrain, or ridges.

Natural Environment – an environment which has not been significantly altered by man's activities and for the most part remains in its natural state.

Nature Area – an ecological unit substantially in a natural condition which exemplifies typical or unique plants and animals.

Nature Conservation – the management of the natural environment to maintain, enhance and protect the existing natural characteristics of that environment.

Official Plan – a program and policy prepared by or for a local or regional municipality covering a planning area or any part thereof, designed to secure the health, safety, convenience or welfare of the inhabitants of the area, and consisting of the texts and maps, describing such programs and policy approved under the provisions of The Planning Act.

Open Landscape Character – the system of rural features, both natural and man-made, which makes up the rural environment, including forests, slopes, streams and stream valleys, hedgerows, agricultural fields, etc.

Ordovician Period – the second of the periods in the Paleozoic Era in geological classification and refers to the strata deposited 350 to 500 million years ago.

Paleozoic Era – a geologic time that is between the Late Precambrian and preceding the Mesozoic Eras and refers to the strata deposited 225 to 570 million years ago.

Pit – land from which sand, gravel, clay or shale is extracted, but does not include a wayside pit.

Preservation – the maintenance and protection of the natural environment thereby allowing for natural processes to continue undisturbed.

Protection – to ensure that human activities are not allowed to occur which will result in the degradation of the quality of an environment.

Public Parks – those parks which are owned and managed by a public agency referred to in Part 3 of this Plan.

Quarry – land from which consolidated aggregate is excavated, but does not include a wayside pit.

Re-entrant Valley – a valley in the Escarpment slope created by the headward erosion of a stream (e.g., Pine River Valley, Dufferin County).

Rehabilitation – the restoration of land from which aggregate has been excavated so that the use or condition of the land is compatible with the use of adjacent lands.

Scenic Easement – an interest in the land negotiated by a public agency which allows the easement-holder specific rights for the purpose of protecting scenic views.

Secondary Plan – a detailed plan for a specific geographic area of a municipality, prepared when there is a need for more specific policies to guide future development.

Sediment Basin – a ponding structure which traps and filters sediments.

Shingle Beach – a beach which is covered with flat pebbles or cobbles.

Silurian Period – a geologic period following the Ordovician and preceding the Devonian Period and refers to the strata deposited 405 to 430 million years ago.

Single-Family Dwelling – a separate building containing not more than one dwelling unit and used by not more than one family.

Sink Hole – a depression in the limestone surface created by the solvent action of water on the rock or produced by the collapse of a cave roof.

Talus Slope – the mass of broken rocks which accumulates at the base of the Escarpment.

Tonne – a metric measurement, 1,000 kg. or 2,205 lbs.

Top of Streambank – the upper edge of the slope of the stream valley where the land levels off; or where there is a flood plain, to the top of slope above the flood plain.

Topography – the configuration of the land including its relief, elevation and the position of its natural and man-made features.

Trail Activities – recreation oriented to trails such as horseback riding, cross-country skiing, hiking, snowmobiling or trail biking.

Unstable Slopes – slopes which are or may be subject to erosion such as mass movement, slumping, landslides, mudflows or rock falls.

Utilities – services such as hydro electric power, gas, oil, water, telephone, sewers, or landfill sites.

Viable Farm Unit – as defined by the Ministry of Agriculture and Food is an agricultural operation where under the operator's management the farm generates sufficient income to:

- 1) provide a good living for the farm family;
- 2) cover costs of operation and maintenance;
- 3) repay all debts;
- 4) further develop the operation if necessary.

Wayside Pit – land from which consolidated or unconsolidated aggregate is excavated for use in a project of a public authority and that is worked outside the limits of the right-of-way of a highway, but does not include a pit or quarry.

Wetlands – marshes, swamps, bogs and other low-lying areas that are covered by water during some portion of the year.

Wildlife Management – the management of wildlife habitats for the purpose of sustaining the quantity and quality of wildlife.



7.1

Bibliography

Selected Bibliography for Part I of the Proposed Plan

Gertler, L. O. *Niagara Escarpment Study, Conservation and Recreation Report*. June, 1968.

Ministry of Treasury, Economics and Intergovernmental Affairs. *Development Planning in Ontario*. 1973.

Niagara Escarpment Commission. *Preliminary Proposals*. 1977.

Ontario Ministry of Treasury, Economics and Intergovernmental Affairs. Parkway Belt Group. *The Parkway Belt West Plan*. July, 1978.

Province of Ontario. *The Niagara Escarpment Planning and Development Act*. (1973, as amended).

Province of Ontario. *Ontario Regulation 453/75* as amended. (1976).

Selected Bibliography for Part 2 of the Proposed Plan

Adirondack Park Agency. *Adirondack Park State Land Master Plan*. 1972.

Amendment No. 1 to the Official Plan for the Nottawasaga Planning Area. Approved by the Minister of Housing. June 20, 1977.

Amendment No. 7 to the Official Plan for the Beaver Valley Planning Area. Approved by the Minister of Housing. March, 1975.

Amendment No. 12 to the Official Plan for the Beaver Valley Planning Area. Approved by the Minister of Housing, August 9, 1976.

Amendment No. 20 to the Official Plan for the Beaver Valley Planning Area. Approved by the Minister of Housing. September 9, 1977.

British Columbia Land Commission. *Spallumcheen: the visual Environment*. 1976.

Clark, J. *Coastal Ecosystems: Ecological Considerations for Management of the Coastal Zone*. 1974.

Clark, J. *Rookery Bay: Ecological Constraints on Coastal Development*. 1974.

Clark, J. *Rookery Bay Land Use Studies: Environmental Planning Strategies for the Development of a Mangrove Shoreline*. 1974.

Conservation Foundation. *The Sanibel Report, Formulation of a Comprehensive Plan based on Natural Systems*. 1976.

Council of State Governments. *State of the Art for Designation of Areas of Critical Environmental Concern*. 1974.

Credit Valley Conservation Authority. "Credit River Watershed Environmentally Sensitive Areas". 1978. (Draft).

Ecologistics Limited. *Hamilton-Wentworth Region Environmentally Sensitive Areas Study*. 1976.

Hamilton Region Conservation Authority. *Plan Review Guidelines*. 1978.

Harvard University. *Three Approaches to Environmental Resource Analysis*. 1967.

Hough Stanbury and Associates Limited. *Design Guidelines for Forest Management*.

International Joint Commission. *Environmental Management Strategy for the Great Lakes System*. 1978.

International Joint Commission. *Pilot Watershed Studies, Summary Report*. 1978.

Juneja, N. *Medford, Performance Requirements for the Maintenance of Social Values. Represented by the Natural Environment of Medford Township, N.J.* 1974.

Local Official Plans, Draft and Approved by the Minister of Housing.

Lynch, K. *Managing the Sense of a Region*. 1976.

McAllister, D.M., ed. *Environment: A New Focus for Land-Use Planning*. National Science Foundation, 1973.

Niagara Escarpment Commission. *Features and Conditions Survey*. April, 1975.

Niagara Escarpment Commission. *Impact of Development on Vacant Lots in the Beaver Valley*. 1979.

Niagara Escarpment Commission and Ontario Ministry of Natural Resources. *Landscape Evaluation Study, Niagara Escarpment Planning Area*. April, 1976.

Niagara Escarpment Commission. *Land Use Land Fragmentation Study*. December, 1977.

Niagara Escarpment Commission. *Study of Existing Lots of Record*. 1977.

Ontario Ministry of Agriculture and Food. *Food Land Guidelines, A Policy Statement of the Government of Ontario on Planning and Agriculture*. 1978.

Ontario Ministry of the Environment. *Groundwater Report for the Niagara Escarpment*. 1979.

Ontario Ministry of the Environment. *Water Management, Goals, Policies, Objectives and Implementation Procedures of the Ministry of the Environment*. 1978.

Ontario Ministry of the Environment. *Water Quality of Crystal Lake in Relation to Shoreline Development*. 1978.

Ontario Ministry of Housing. *Environmental Management Opportunities and Constraints within the North Pickering Site*. 1975.

Ontario Ministry of Housing. *Rural Estate Guidelines*. 1977.

Ontario Ministry of Natural Resources. *Earth Science Candidate Nature Reserves in the Niagara Escarpment*. 1976.

Ontario Ministry of Natural Resources. *Fisheries Resources of the Niagara Escarpment Planning Area*. 1977.

Ontario Ministry of Natural Resources. *Hazard Lands in the Niagara Escarpment Planning Area*. April, 1976.

Ontario Ministry of Natural Resources. *Nature Reserve Candidates in the Niagara Escarpment Planning Area*. 1976.

Ontario Ministry of Natural Resources. *Significant Natural Areas along the Niagara Escarpment*. 1976.

Regional Municipality of Halton. *Environmentally Sensitive Areas Study*. 1978.

San Francisco Bay Conservation and Development Commission. *Suisun Marsh Protection Plan*. 1976.

Statistics Canada. *Census of Canada*. 1971.

Thurow, C., Toner, W., Erley, D. *Performance Controls for Sensitive Lands*. 1975.

Underwood, McLellan and Associates Limited. *Settlement Capability Study for Hamilton-Wentworth Region*. Volumes 1 and 2, The Regional Municipality of Hamilton-Wentworth, 1976.

United States Department of Housing & Urban Development. *Interim Guide for Environmental Assessment*. 1975.

United States Department of the Interior. *Planning for Wildlife and Man*. 1975.

United States Department of Natural Resources. *Michigan Soil Erosion and Sedimentation Control Guidebook*. 1975.

United States Department of Transportation. *Environmental Assessment Notebook Series*. 1975.

Urban Wildlife Research Centre, Inc. *Planning for Wildlife in Cities and Suburbs*. 1978.

Wallace, McHarg, Roberts and Todd. *An Ecological Planning Study for Wilmington and Dover, Vermont*. 1972.

Selected Bibliography for Part 3 of the Proposed Plan

Bruce Trail Association. *The Bruce Trail Guidebook*. Tenth Edition, 1976.

Bruce Trail Association. *Bruce Trail News*. (1977-1979).

Hamilton Region Conservation Authority. *Dundas Valley Conservation Area Master Plan*. 1978.

Nature Conservancy. *The Preservation of Natural Diversity: A Survey and Recommendations*. 1975.

Nature Conservancy. *Preserving our Natural Heritage*. Volumes 1 and 2. 1977.

Niagara Escarpment Commission. *Report of the Bruce Trail Study Group*. February, 1977.

Ontario Ministry of Natural Resources. *Boyne Valley Provincial Park Master Plan*. 1975.

Ontario Ministry of Natural Resources. *Conservation Authorities in the Niagara Escarpment Planning Area*. 1977.

Ontario Ministry of Natural Resources. *Fathom Five Provincial Park Master Plan*. 1973.

Ontario Ministry of Natural Resources. *Forks of the Credit Provincial Park Master Plan*. 1973.

Ontario Ministry of Natural Resources. *The Land Acquisition Program of the Ministry of Natural Resources and Conservation Authorities in the Niagara Escarpment Planning Area*. 1977.

Ontario Ministry of Natural Resources. *Mono Cliffs Provincial Park Master Plan*. 1974.

Ontario Ministry of Natural Resources. *Ontario Provincial Parks Planning and Management Policies*. 1978.

Ontario Ministry of Natural Resources. *Short Hills Provincial Park Master Plan*. 1977.

Parks Canada. *Parks Canada Policy*. 1979.

Parks Canada. *Trail Manual*. 1978.

Selected Bibliography for Part 4 of the Proposed Plan

Acres Consulting Services Ltd., for the Niagara Escarpment Commission. *Underground Aggregate Mining Preliminary Feasibility Study*. Ontario Ministry of Treasury, Economics and Intergovernmental Affairs, 1976.

Armson, K.A. *Forest Management in Ontario*. Ministry of Natural Resources, 1976.

Canada Department of Agriculture. *Ontario Soil Survey Reports*. Various dates.

Canada Department of Energy, Mines and Resources, Surveys and Mapping Branch. National Topographic System Maps (1:25,000 and 1:50,000). Various dates.

Canada Department of Regional Economic Expansion, *Soil Capability Classification for Agriculture*, The Canada Land Inventory Report No. 2, 1969.

Canada Department of Transport, Meteorological Branch. *The Climate of Southern Ontario*. 1968.

Ecological Services for Planning Limited et al. *Thornbury Technical Report*. 1976.

Environment Canada. Lands Directorate, *Land Capability for Forestry* (1:250,000 maps). 1971-72.

Gillard, W.H., and Tooke, T.R. *The Niagara Escarpment from Tobermory to Niagara Falls*. 1975.

Leitch, A. *Into the High Country*. 1975.

Jackson, J.N. *St. Catharines Ontario, Its Early Years*. 1976.

Liberty, B.A. *Geology of the Bruce Peninsula Ontario*, Geological Survey of Canada, Paper 65-41 (Report and 13 maps 1:63,360), Department of Energy, Mines and Resources, 1966.

Canada Department of Energy Mines and Resources. *Air Photography of the Niagara Escarpment Planning Area* (1:50,000). 1976.

Niagara Escarpment Commission. *Features and Conditions Survey*. 1975.

Niagara Escarpment Commission and Ontario Ministry of Natural Resources. *Landscape Evaluation Study of the Niagara Escarpment Planning Area*. April, 1976.

Niagara Escarpment Study Group. *Niagara Escarpment Study Fruit Belt Report*. Department of Treasury and Economics, 1972.

Northway Survey Corporation Ltd., for the Niagara Escarpment Commission. Air Photography of the Niagara Escarpment Planning Area (1:15,840). 1974.

Ontario Ministry of Agriculture and Food. *Agricultural Code of Practice*. 1976.

Ontario Ministry of Agriculture and Food. *A Strategy for Ontario Farmland*. 1976.

Ontario Ministry of Culture and Recreation. *An Archaeological Transect Through Ontario*. 1976.

Ontario Ministry of Culture and Recreation. *Historical Resources in the Niagara Escarpment Planning Area*. July, 1976.

Ontario Ministry of Culture and Recreation. *Niagara Escarpment Heritage Resource Study, Volumes 1 & 2*, 1978.

Ontario Ministry of Culture and Recreation. *Niagara Escarpment Planning Area Archaeological Resources*. 1976.

Ontario Ministry of Natural Resources. *A Policy for Mineral Aggregate Resource Management in Ontario*. Report of the Ontario Mineral Aggregate Working Party, Ontario Ministry of Natural Resources, December, 1976.

Ontario Ministry of Natural Resources. *Forestry in the Niagara Escarpment Planning Area*. 1977.

Ontario Ministry of Natural Resources. *Industrial Mineral Resources Inventory of the Niagara Escarpment Area*. 1977.

Ontario Ministry of Natural Resources. *Ministry of Natural Resources in the Niagara Escarpment Planning Area: A Summary Report*. 1977.

Ontario Ministry of Natural Resources. Ontario Land Inventory, Timber Use Capability (1:250,000 maps). 1970.

Ontario Ministry of Natural Resources. *Wildlife in the Niagara Escarpment Planning Area*. 1977.

Proctor and Redfern Ltd., for the Ontario Ministry of Natural Resources. *Mineral Aggregate Study — Central Ontario Planning Region*. Ontario Ministry of Natural Resources, March, 1974.

Proctor and Redfern Ltd. *The Clay Brick Industry and the Shale Resources of Ontario*. 1978.

Proctor and Redfern Ltd., and Gartner Lee Associates Ltd., for the Ontario Ministry of Natural Resources. *Mineral Aggregate Study and Geological Inventory Southwestern Region of Ontario*, Ontario Ministry of Natural Resources, March, 1977.

Province of Ontario, *The Heritage Act*. R.S.O. Chapter 122 (1974).

Province of Ontario. *The Pits and Quarries Control Act*. R.S.O. Chapter 78 (1971).

Province of Ontario. *The Trees Act*. R.S.O. Chapter 468 (1970).

Province of Ontario. *The Woodlands Improvement Act*, R.S.O. Chapter 52 (1970).

Telford, P.G. et al. *Paleozoic Geology*, (preliminary maps 1:50,000). Ontario Division of Mines, Ministry of Natural Resources, 1974.

Township of Keppel. *Township of Keppel, Centennial 1855-1955*. 1955.

University of Guelph, Canada Soil Survey Unit for the Niagara Escarpment Commission. *Limitations of Soils within the Niagara Escarpment Planning Area for Urbanization and Recreational Uses*. 1976.

University of Guelph, Centre for Resource Development, *Planning for Agriculture in Southern Ontario*. ARDA Report No. 7, Department of Regional Economic Expansion and the Ontario Ministry of Agriculture and Food, 1972.

Wark, L.L. *Cold Temperature Limitations on Apple Acreage Expansion in the Beaver Valley*. A paper presented at the East Lakes meeting of the American Association of Geographers, University of Windsor, 1967.



Notes



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December 17, 1979

Niagara Escarpment Proposed Plan

Errata

1. P.36 The last sentence should read as follows:

"The estimated total acreage of land left to be acquired for the Trail based on approximately 1.5 hectares per kilometre of trail (6.0 acres per mile), either as trail easements or outright purchases, is approximately 720 hectares (1,800 acres)."

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